2-11 LOCATION, CAPACITIES, AND NUMBERS.

TOPIC	CLASSIFICATION	REMARKS
2-11.1 Planning or construction information revealing that an installation is a nuclear weapons storage site.	C-TSFRD	Special circumstances, such as international sensitivity of site location, will determine the level of classification.
2-11.2 Information revealing installation is a storage site for nuclear weapons, whether or not presence of weaspons can be determined.	C-TSFRD	Applies equally to permanent and temporary (field) installation. Specifically, the term 'SAS site," when used in conjunction with a unit designation and/or a geographical location in Europe, is classified at a minimum of SFRD. Special circumstances, such as international or domestic sensitivity of site location, will be considered in determining the level of classification. This does not apply to the fact of capability to store or handle nuclear weapons, which is unclassified (except as indicated in paragraph 1-3.3).
2-11.3 Information revealing that an installation was an NSS (National Stockpile Site).	CFRD	
2-11.4 The fact that nuclear weapons are stored in any state without revealing a specific location.	CFRO	Classification of specific locations will be governed by the domestic political climate, the sensitivity of the site location, and the relation to national planning.

TOPIC	CLASSIFICATION	REMARKS
2-11.5 The presence of nuclear weapons in countries other than the U.S.A.	U-CFRD	International sensitivity of site location, local political climate, national and international military planning, and relation to U.S. strategic/tactical operations will be considered in determining the appropriate level of classification.
2-11.5.1 In terms of geographical areas.	U-TSFRD	The fact that there are several thousand nuclear weapons in Europe and the fact that there are nuclear weapons in CINCPAC's area of responsibility are unclassified.
2-11.5.2 In terms of regional defense organizations.	U-TSFRD	The fact of nuclear weapons in NATO is unclassified.
2-11.5.3 In terms of geopolitical unit (country, U.S. possession, territories, or other areas under U.S. administration).	C-TSFRD	
2-11.5.4 In terms of specific locations defined above.	C-TSFRD	See paragraphs 2-11.5, 2-11.5.2, and 2-11.5.3.
2-11.5.5 In terms of planning and negotiating.	C-TSFRD	
2-11.6 CAPACITY.		

TOPIC	CLASSIFICATION	REMARKS
2-11.6.1 The capacity in terms of quantity of specific types of nuclear weapons.	U-SFRD	Type refers to Mk, B, or W number. If location is revealed, see paragraphs 2-11.2 and 2-11.5.
2-11.6.2 The quantity of nuclear weapons actually at a site.	CFRD	If location is revealed, see paragraphs 2-11.2 and 2-11.5.
2-11.6.3 The capacities of ships which are readily apparent from launcher tubes, deck drilling patterns, or other ship's construction.	U	
2-11.6.4 The stated capacities of individual ships, when such capacities are not readily apparent as in paragraph 2-11.6.3, or the various mixes of weapons authorized for ships.	CFRD	
2-11.6.5 Capacities stated in terms of CVA's, fleets, forces, or areas.	SFRD	
2-11.6.6 The numbers of nuclear weapons actually in storage in individual ships.	CFRD	
2-11.6.7 The total numbers of nuclear weapons within fleet, force, or type commands.	SFRD	
2-11.6.8 The capability of any ship, aircraft, or operating unit to stow, handle, launch, drop, place, or project nuclear weapons (except as indicated in paragraph 1-3.3).		

TOPIC	CLASSIFICATION	REMARKS
2-11.8 ASSOCIATION WITH OPERATIONAL ORGANIZATIONS IN THE UNITED STATES OR OVERSEAS.		When units cannot be identified as Nuclear Units or Nuclear-Capable Units, information about these Units will receive the normal security protection afforded like conventional units.
2-11.8.1 The fact that the U.S. has Nuclear Units and Nuclear-Capable Units among its operating forces.	U	
2-11.8.1.1 Identification of these units as such by number, name, or other desgination.	U	Identification, per se, does not establish presence of nuclear weapons; when presence of nuclear weapons is established by other factors, classify information revealing movement/location of designated unit per applicable topic covering nuclear weapon locations.
2-11.8.1.2 Information specifying the location of individual units.	U-TSFRD	Unclassified if possession of nuclear weapons is not established (except as indicated in paragraph 1-3.3). If possession is confirmed, classify accordingly.
2-11.8.2 The fact that a particular Nuclear-Capable Unit actually has nuclear weapons.	C-TSFRD	But the fact that SSBN's on patrol carry 16 missiles with nuclear warheads is unclassified.

	CLASSIFICATION	REMARKS
2-11.8.3 The fact that a Nuclear Unit actually has nuclear weapons.	U-TSFRD	The fact that MINUTEMAN, TITAN, and SAFEGUARD system missiles have nuclear warheads in place or that aircraft units in CONUS known, on an unclassified basis, to be on nuclear alert have nuclear weapons in place is unclassified. In other cases, classify in accordance with numbers or location considerations.
2-11.9 STOCKPILE QUANTITIES AND PRODUCTION RATES.		The classifications indicated in this paragraph are based on information revealed by quantities only. Classification guidance for design information, including nomenclature and storage site locations, is provided in other paragraphs of this guide.
2-11.9.1 Total stockpile quantities of all thermonuclear and fission weapons when the figures show the number of each weapon by specific weapon type.	SFRD	Type refers to Mk, B, or W number.
2-11.9.2 The stockpile quantities or production rates of a single weapon type.	SFRD	

TOPIC	CLASSIFICATION	REMARKS
2-11.9.3 The grand total quantity of nuclear weapons in the stockpile when described as a collective figure only; e.g., "There is a grand total of X number of weapons in the stockpile."	SFRD	However, the statement that we maintain a total number of nuclear warheads, tactical as well as strategic, in the tens of thousands is unclassified.
2-11.9.4 Stockpile quantities of nuclear or nonnuclear components that reveal information classified by paragraphs 2-11.9.2 and 2-11.9.3.	SFRD	Unclassified if such information is not revealed.
2-11.9.5 Production rates for a period of 1 year or more of all thermonuclear and fission weapons when the figures show the number produced of each weapon by specific weapon type.	SFRD	
2-11.9.6 Production rates of all thermonuclear and fission weapons when given as a collective figure only; e.g., "The production rate for FY 19— is X number of weapons."	SFRD	
2-11.9.7 Production rates of nuclear or nonnuclear components that reveal information classified by paragraphs 2-11.9.1 through 2-11.9.6.	SFRD	Unclassified if such information is not revealed.
2-11.9.8 Random numerical identifiers of nuclear weapons or of nuclear weapon parts, provided the ratio to stockpile totals is not revealed.	U	

Office-Supreme Court, U.S.
FILED
MAY 22 1981
ALEXANDER L. STEVAS,
CLERK

No. 80-1377

In the Supreme Court of the United States

OCTOBER TERM, 1980

CASPAR W. WEINBERGER, SECRETARY OF DEFENSE, ET AL., PETITIONERS

v.

CATHOLIC ACTION OF HAWAII/PEACE EDUCATION PROJECT, ET AL.

ON A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

JOINT APPENDIX

Petition Filed February 14, 1981
Certiorari Granted April 6, 1981

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The following items, which are a part of the Joint Appendix, are printed as appendices to the petition for a writ of certiorari:

District Court Findings of Fact and Conclusions of Law (Appendix D, 10a–15a);

District Court Judgment (Appendix E, 16a);

Court of Appeals Opinion (Appendix A, 1a–7a);

Court of Appeals Judgment (Appendix B, 8a);

Order Denying Petition for a Rehearing (Appendix C, 9a);

Environmental Impact Assessment (Appendix F, 17a–26a);

Candidate Environmental Impact Statement (Appendix G, 27a–35a);

Joint ERDA/DOD Nuclear Weapon Classification Guide (Appendix H, 36a–45a);

Navy Security Classification Guide for Nuclear Weapon (Appendix I, 46a–56a);

OPNAV INSTRUCTION 5721.1C (Appendix J, 57a–59a).

Relevant District Court Docket Entries

1978		
Mar 13	1	Complaint for Injunctive and Declaratory Relief and Summons issued
		* * *
Mar 29	12	Answer of Defendants
		* * *
1979		
Mar 5	28	Answer of Defendants, Secretaries of Defense and of Navy and Chief of Naval Operations
		* * *
Mar 5	31	Stipulation
		* * *
Mar 13	33	Findings of Fact and Conclusions of Law–cc: Zulkoski, Heen *TURRENTINE*
	34	Judgment–Pltfs' M/PI DENIED–cc: Zulkoski, Heen (CHINN)
		* * *
Apr 27	45	Notice of Appeal to the Court of Appeals–cc: Clerk, 9th CCA w/copy NA & docket entries, Zulkowski/Stearns, & Heen
		* * *
1980		
Oct 23	49	JUDGMENT–From the 9th CCA-REVERSED AND REMANDED *FLETCHER, MERRILL, SCHROEDER* cc: Judge King, Judge Turrentine U.S. Atty & Called U.S. Atty's & Life of the Land–(Mr.Zulkoski no Longer with Life of Land-as Pltf's Atty)

Relevant Court of Appeal Docket Entries

* * *

1980	
July 17	ORDERED OPINION (MERRILL) FILED & JUDG TO BE FILED & ENTD.
July 17	Filed opinion–reversed and remanded for further proceedings.
July 17	Filed & Entered Judgment.–rmc–
	* * *
Oct 10	Filed order (CMM, MMS & BBF) denying the petition for rehearing and rejecting the suggestion for a rehearing en banc. –rmc–
Oct 20	MANDATE ISSUED
	* * *
1981	
Apr 10	Filed certified copy of SC order of 4/6/81, granting cert. (panel notified) pn (copies to panel)

UNITED STATES DISTRICT COURT
FOR THE
DISTRICT OF HAWAII

CIVIL ACTION
FILE NO. 78–0085

CATHOLIC ACTION OF HAWAII/PEACE EDUCATION PROJECT, a non-profit Hawaii association; JAMES ALBERTINI; IAN YONGE LIND; EILEEN BELTON; PETER TAGALOG; ROGER SHEETZ; EDWARD CASEY; NORA OGAWA; AND LIFE OF THE LAND, a non-profit Hawaii corporation,
PLAINTIFFS,

v.

HAROLD BROWN, SECRETARY OF DEFENSE, W. GRAHAM CLAYTOR, JR., SECRETARY OF THE NAVY, JAMES L. HOLLOWAY, CHIEF OF NAVAL OPERATIONS, RALPH S. WENTWORTH, JR., COMMANDANT OF THE 14th NAVAL DISTRICT, AND THOMAS B. HAYWARD, COMMANDER-IN-CHIEF, PACIFIC FLEET, UNITED STATES NAVY,
DEFENDANTS.

SUMMONS

To the above named Defendants:

You are hereby summoned and required to serve upon WALTER P. ZULKOSKI, plaintiff's attorney, whose address 404 Piikoi Suit 209, Honolulu, Hawaii 96814, an answer to the complaint which is herewith served upon you, within 60 days after service of this summons upon you, exclusive of the day of service. If you fail to do so, judgment by default will be taken against you for the relief demanded in the complaint.

WALTER A.Y.H. CHINN
Clerk of Court.

ORIETTE VEGAS
Deputy Clerk

Date: March 13, 1978

NOTE: This summons is issued pursuant to Rule 4 of the Federal Rules of Civil Procedure.

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF HAWAII

CIVIL NO._____

CATHOLIC ACTION OF HAWAII/PEACE EDUCATION PROJECT, a non-profit Hawaii association; JAMES ALBERTINI; IAN YONGE LIND; EILEEN BELTON; PETER TAGALOG; ROGER SHEETZ; EDWARD CASEY; NORA OGAWA AND LIFE OF THE LAND, a non-profit Hawaii corporation,
PLAINTIFFS,

v.

HAROLD BROWN, SECRETARY OF DEFENSE, W. GRAHAM CLAYTOR, JR., SECRETARY OF THE NAVY, JAMES L. HOLLOWAY, CHIEF OF NAVAL OPERATIONS, RALPH S. WENTWORTH, JR., COMMANDANT OF THE 14TH NAVAL DISTRICT, AND THOMAS B. HAYWARD, COMMANDER-IN-CHIEF, PACIFIC FLEET, UNITED STATES NAVY,
DEFENDANTS.

COMPLAINT FOR INJUNCTIVE AND DECLARATORY RELIEF

I. *PRELIMINARY STATEMENT*

1. Plaintiffs bring this action to have this Court declare unlawful and enjoin Defendants' construction of an ammunition storage facility at West Loch, Oahu. Defendants have begun construction of a storage facility for conventional and nuclear weapons in West Loch without complying with the various federal and state laws designed to protect West Loch's environmental and cultural resources. Plaintiffs seek to have Defendants comply with the laws designed to protect West Loch and to cease their illegal activities which are potentially destructive to human life, wildlife, the land, and cultural heritage of the West Loch area.

II. *JURISDICTION*

2. Jurisdiction of this Court is invoked under 28 U.S.C. Section 1331 (federal question), 1361 (mandamus) and

under 16 U.S.C. Section 1540 (endangered species). The amount in controversy herein exceeds the sum of $10,000 exclusive of interests and costs. A declaration of rights is sought under 28 U.S.C. Section 2201,2202.

3. Plaintiff's federal claims arise under the National Environmental Policy Act, 42 U.S.C. Section 4321 *et seq.*; The Endangered Species Act of 1973 16 U.S.C. Section 4901 *et seq.*; National Historic Preservation Act, 16 U.S.C. Section 470 *et seq.*; Executive Order 11593;

III. *PARTIES*

4. Plaintiff CATHOLIC ACTION OF HAWAII/PEACE EDUCATION PROJECT is an unincorporated association composed of residents of the State of Hawaii with its office at 1918 University Avenue, Honolulu, Hawaii. Among the purposes of the organization are to do research and action to reduce the dangers to Hawaii residents and the world from nuclear weapons. Its members use the West Loch area for fishing and recreation.

5. Plaintiff, JAMES ALBERTINI, is a United States citizen who resides at 2812 Kahawai Street, Honolulu, Hawaii. He is coordinator of CATHOLIC ACTION OF HAWAII/PEACE EDUCATION PROJECT, and he has fished off the waters of Waipio peninsula since 1975.

6. Plaintiff IAN YONGE LIND is a United States citizen of Hawaiian ancestory, who has been a life long resident of Hawaii. He resides at 1139 9th Avenue, Honolulu, Hawaii. He flies regularly on commercial airlines that fly over the site of the proposed West Loch ammunition storage facility.

7. Plaintiff EILEEN BELTON, is a United States citizen and a resident of Hawaii. She presently resides at 91–385 Papipi Road, Ewa Beach, a community adjacent to the blast zone for the West Loch facility. She is presently a student at Leeward Community College.

8. PETE TAGALOG is a United States citizen and resides at 94–113 Leowaena Street, Waipahu, Hawaii. He is 46 years old, a life long resident of Waipahu, who has fished and crabbed in the waters and shore in the West Loch area

since 1942 and uses the catch therefrom to augment his family's food supply.

9. Plaintiff ROGER SHEETZ is a United States citizen who resides at 94–358 Kahuahele Street, Waipahu, Hawaii. He uses the West Loch area for recreational purposes including boating and crabbing.

10. Plaintiff, EDWARD CASEY, is a citizen of the United States, who resides at 66–377 B Haleiwa Road, Haleiwa, Hawaii. He is an instructor at Leeward Community College who jogs in the West Loch area, takes his students there, and uses the area for watching birds, especially the Hawaiian stilt, an endangered species.

11. Plaintiff NORA OGAWA, is a citizen of the United States, who is a life long resident of Hawaii. She resides at 94–514 Kamakahi Street, Waipahu, Hawaii. She fishes, clams and crabs in the West Loch area. She together with her family, use Waipio Peninsula and Ewa Beach Park for recreational purposes.

12. Plaintiff LIFE OF THE LAND, is a non-profit Hawaii corporation with its principal place of business at 404 Piikoi Street, Honolulu, Hawaii. The principal purpose of LIFE OF THE LAND is to preserve and protect the environment of the State of Hawaii. Its members live near the West Loch ammunition storage facility and they use the adjacent lands for recreational purposes.

13. Defendant HAROLD BROWN is Secretary of Defense and in said capacity he is responsible for the administration, direction, and control over the Department of Defense. Defendant W. GRAHAM CLAYTOR, JR., is Secretary of the Navy and under the direction and control of the Secretary of Defense, he is responsible for the policies and control of the Department of the Navy, including jurisdiction over the proposed West Loch storage facility. Defendant JAMES L. HOLLOWAY is the Chief of Naval Operations and under the control and direction of the Secretary of the Navy, he exercises command over the Operating Forces of the Navy. Defendant RALPH S. WENTWORTH, JR., is the Commandant of the 14th Naval District, the headquarters of which is Pearl Harbor,

Hawaii. In his capacity as Commandant, Defendant WENTWORTH exercises command of assigned naval shore activities within the district which includes the proposed West Loch facility. Defendant THOMAS B. HAYWARD is the Commander-in-Chief Pacific Fleet and in said capacity is the ultimate recipient of funds allocated by the United States Navy for naval operations on the proposed West Loch facility. Each of the Defendants is sued solely in his official capacity.

LEGAL CLAIMS

Claim One

NATIONAL ENVIRONMENTAL POLICY ACT

14. Pursuant to Section 102(c) of the National Environmental Policy Act (NEPA), 42 U.S.C. Section 4332 (c), agencies of the federal government are required to "include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment" a detailed statement on the environmental impact of such proposals or actions.

15. Federal regulations implementing NEPA include in their definition of "actions" which may significantly affect the quality of the human environment "(r)ecommendations or favorable reports relating to legislation including requests for appropriations." (Emphasis added). 40 C.F.R. 1500.5.

16. Department of Defense regulations provide that environmental impact statements must be submitted with the Department's annual appropriation requests for all items in their budget and all actions by DOD components which are major actions having a significant effect on the environment or which are controversial not part of a plan; program or procedure that has had an EIS. 32 C.F.R. 214.6(d).

17. The funds which permit the United States Navy to build the West Loch ammunition storage facility are derived from a general fund entitled, "Operations and Maintenance, Navy (O&MN)" allocated to the Commander-in-Chief, U.S. Pacific Fleet.

18. The Operations and Maintenance, Navy fund is a federal appropriation requested annually by Defendants.

19. Defendants have assisted in the preparation of budget requests which have included funds to be used for building the West Loch facility. Defendants have not filed with such requests or at any time, the statutorily required environmental impact statements.

20. The building of the West Loch facility is under the supervision of the Defendants.

21. The building of the West Loch ammunition storage facility which is being done by Defendants is a major action having a significant effect on the environment and is controversial in nature.

22. In building the West Loch ammunition storage facility without submitting an environmental impact statement with their annual appropriation request for federal monies to fund such building or at any other time, Defendants are in violation of 42 U.S.C. Section 4332, 40 C.F.R. 1500.5 and 32 C.F.R. 214.6(d).

Claim Two

ENDANGERED SPECIES ACT OF 1973

23. Pursuant to Section 7 of the Endangered Species Act of 1973, Defendants are required to carry out programs for the conservation of endangered species and threatened species. 16 U.S.C. Section 1536.

24. Pursuant to Section 7 of the Endangered Species Act of 1973, Defendants are required to take such actions as are necessary to insure that actions authorized by them do not jeopardize the continued existence of endangered and threatened species. 16 U.S.C. Section 1536.

25. Pursuant to Section 7 of the Endangered Species Act of 1973, Defendants are required to take such actions as are necessary to insure that actions authorized by them do not result in the destruction or modification of the critical habitat of any endangered or threatened species.

26. Defendants have violated Section 7 of the Endangered Species Act of 1973 with regard to building of the West Loch ammunition storage facility in that:

(a) Defendants have neglected to carry out any program for the conservation of endangered and threatened species which may exist on or near the facility.

(b) Defendants have neglected to take necessary actions to insure that their operations do not jeopardize the continued existence of endangered and threatened species which may exist on or near the facility and

(c) Defendants have neglected to take necessary actions to insure that their operations do not result in the destruction or modification of habitat of endangered or threatened species which may be critical to the survival of said species.

27. Some or all of the species listed in Exhibit "A" attached hereto exist on or about the West Loch facility and are adversely affected by Defendants actions.

28. The species listed in Exhibit "A" have been nominated as eligible for listing as endangered, and threatened species and therefor eligible for protection under the aforementioned Act.

Claim Three

PRESERVATION OF HISTORIC SITES & EXECUTIVE ORDER NO. 11593

29. The United States Congress has statutorily declared "that the historical and cultural foundations of the Nation should be preserved as a living part of our community life and development in order to give a sense of orientation to the American people." 16 U.S.C. Section 470, 470(f).

30. Plaintiff LIND is an American citizens of Hawaiian descent whose historical and cultural foundations extend to the area of the West Loch facility.

31. The site of the West Loch facility contains sites and objects which are of historical, religious and cultural significance to the above-named Plaintiffs and other individuals of Hawaiian descent.

32. Pursuant to Executive Order No. 11593, (May 13, 1971), note to 16 U.S.C. Section 470, Defendants are, as a matter of policy, required to administer the cultural properties under their control "in a spirit of stewardship and trusteeship for future generations."

33. Pursuant to 16 U.S.C. Section 470(f) the Defendants are required to take into account prior to the approval of any expenditure of Federal funds, the effect their undertaking will have on any site, building, structure, or object that is included in the National Register and shall afford the Advisory Council on Historic Preservation a reasonable opportunity to comment with regard to such undertaking.

34. Defendants have authorized the building of the West Loch ammunition storage facility which is inherently destructive to all sites, buildings, objects, and structures which may exist there, without allowing the Advisory Council to comment on taking such sites, buildings, objects, and structures into account in violation of Executive Order 11593, and 16 U.S.C. Section 470(f).

Claim Four

ADMINISTRATIVE PROCEDURES ACT

35. Pursuant Section 706 of the Federal Administrative Procedures Act, Defendants may not pursue actions that are "arbitrary and capricious." 5 U.S.C. 706(2)(a).

36. Defendants have failed to follow the requirements of the National Environmental Policy Act, the Endangered Species Act of 1973, the National Historic Preservation Act of 1966, and Executive Order No. 11593 in constructing a nuclear weapons storage facility at West Loch, even though such construction is a major federal action that would have a significant effect on the environment and is controversial.

37. Defendants failure to follow the above Acts and Order in the construction of the West Loch ammunition facility constitutes arbitrary and capricious action in violation of the Administrative Procedures Act 5 U.S.C. 706(2)(a).

IRREPARABLE INJURY

38. Plaintiff's are suffering and will continue to suffer irreparable injury by reason of Defendants continued building of the West Loch facility which inherently will endanger the environment, lives, and historic sites.

39. Plaintiff's have no plain, adequate or speedy remedy at law to redress such injury and deprivation and therefore

bring the suit for declaratory and injunctive relief as their only means of securing such relief.

Wherefore, Plaintiff's pray that this Court:

A. Preliminarily and permanently enjoin the Defendants, their agents, and assignees from building the West Loch facility until Defendants have complied with the requirements of the National Environmental Policy Act, the Endangered Species Act of 1973, Executive Order 11593, the National Historic Preservation Act of 1966, and the regulations promulgated thereunder.

B. Preliminarily and permanently enjoin Defendants, their agents, and assignees from failing to perform all acts required by the National Environmental Policy Act, the Endangered Species Act of 1973, Executive Order 11593, the National Historic Preservation Act of 1966, and the regulations promulgated thereunder.

C. Declare that Defendants are in violation of those statutes, regulations and orders listed in paragraph "A" of this prayer for relief.

D. Allow Plaintiffs their costs and attorneys fees and grant them such relief as the Court may deem just and appropriate.

DATED: Honolulu, Hawaii March 13, 1978.

WALTER P. ZULKOSKI
FRED BENCO
Attorneys for Plaintiffs

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF HAWAII

CIVIL NO. 78-0085

CATHOLIC ACTION OF HAWAII/PEACE EDUCATION PROJECT, ET AL.,
PLAINTIFFS,

v.

HAROLD BROWN, ET AL.,
DEFENDANTS.

ANSWER OF DEFENDANTS

Comes now RALPH S. WENTWORTH, Jr. and THOMAS B. HAYWARD, defendants herein, by and through their undersigned attorneys, who in answer to the Complaint for Injunctive and Declaratory Relief state as follows:

1. Defendants admit that the Department of the Navy has commenced construction of an ammunition storage facility at West Loch, Oahu. Each and every other allegation as set forth in paragraph 1 of the complaint is denied.

2. Defendants admit the allegations as contained in paragraphs 14, 15, 18, 23, 24, 25, 28, 29 and 32 of the complaint.

3. The defendants deny each and every allegation as set forth in paragraphs 2, 3, 21, 22, 26, 30, 31, 34, 35, 36, 37, 38 and 39 of the complaint.

4. Defendants are without knowledge and information sufficient to form a belief as to the truth of the allegations as contained in paragraphs 4, 5, 6, 7, 8, 9, 10, 11 and 12 of the complaint, and to the extent an answer is required, each and every allegation as contained therein is denied.

5. Defendants admit the allegations as contained in paragraph 13 of the complaint, however, defendants deny that in the capacity of Commandant, defendant Wentworth exercised his command of assigned naval shore activities

within the district. Rear Admiral Wentworth is Commander, Naval Logistics Command, U.S. Pacific Fleet, and in that capacity has no authority to suspend construction of the ammunition storage facility at West Loch, Oahu. Defendants further deny that defendant Hayward is a recipient of funds allocated by the United States Navy for naval operations on the proposed West Loch facility. Furthermore, defendants deny that defendant Hayward has authority to suspend the construction of the West Loch facility. Only after completion of the construction of the ammunition storage facility at West Loch, Oahu, would defendants Wentworth and Hayward become responsible for the use of the facility.

6. Defendants in answer to the allegations as contained in paragraph 16 of the complaint deny that 32 CFR 214.6(d) requires submittal of an Environmental Impact Statement. That provision requires the assessment of the environmental consequences and only "if it is determined that the proposal would significantly affect the environment and EIS is required and shall be submitted with the proposal." Therefore, each and every allegation as contained in paragraph 16 of the complaint is denied.

7. Each and every allegation as contained in paragraph 17 of the complaint is denied. Only $127,000.00 is derived from operations and maintenance. Navy funds, allocated to the Commander, Naval Electronics Systems Command, who in turn allocated them to the Commanding Officer, Naval Shore Electronics Engineering Activity, Pacific who in turn allocated it to the Commander, Pacific Division, Naval Facilities Engineering Command and thence to the Officer in Charge of Construction, Naval Facilities Engineering Command Contracts, Mid Pacific.

8. Defendants in response to the allegations as contained in paragraph 19 of the complaint admit that the defendants have assisted in the preparation of budget requests which have included funds to be used for building the West Loch facility. Each and every other allegation as contained in paragraph 19 of the complaint is denied.

9. Defendants in answer to paragraph 20 of the complaint admit the building of the West Loch facility is under the su-

pervision of defendants Brown and Claytor, but deny that the construction of the aforesaid facility is under the supervision of defendants Holloway, Hayward and Wentworth.

10. Defendants in answer to paragraph 27 of the complaint admit that some of the species listed in Exhibit A attached to the complaint exist on or about the West Loch facility some of the time. However, defendants deny that any of the species so listed are adversely affected by the construction of the ammunition storage facility at West Loch, Oahu.

11. Defendants in answer to paragraph 33 of the complaint admit that 16 USC 470(f) requires federal agencies "prior to the approval of the expenditure of any federal funds on the undertaking . . . take into account the effect of the undertaking on any district, site, building, structure or object that is included in the National Register and afford the Advisory Council on Historic Preservation . . . a reasonable opportunity to comment with regard to such undertaking." Defendants deny each and every other allegation as contained in paragraph 33 of the complaint and that the Ordnance Storage Facility site is contained within the boundary of any site listed on the National Register.

SECOND DEFENSE

The court lacks jurisdiction over the named defendants.

THIRD DEFENSE

The plaintiffs lack standing to bring the instant law suit.

FOURTH DEFENSE

The National Environmental Protection Act does not apply to classified military projects.

FIFTH DEFENSE

The plaintiffs' are guilty of laches.

SIXTH DEFENSE

The plaintiffs have not and will not suffer irreparable damages.

SEVENTH DEFENSE

The court lacks jurisdiction over the subject matter in that plaintiffs have failed to file the requisite bond.

EIGHTH DEFENSE

Plaintiffs have failed to join indispensable parties.

NINTH DEFENSE

Plaintiffs have failed to state a cause of action upon which relief can be granted.

TENTH DEFENSE

This court lacks jurisdiction over defendants Harold Brown, W. Graham Claytor, Jr., and James L. Holloway due to the insufficiency of service of process upon them.

WHEREFORE, defendants pray that the complaint be dismissed and that the defendants be awarded their costs and attorney's fees and any other relief deemed appropriate.

DATED: March 28, 1978, at Honolulu, Hawaii.

HAROLD M. FONG
United States Attorney
District of Hawaii

By_____
WILLIAM J. EGGERS III
Assistant U.S. Attorney

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF HAWAII

CIVIL NO. 78-0085

CATHOLIC ACTION OF HAWAII/PEACE EDUCATION PROJECT, ET AL., PLAINTIFFS,

v.

HAROLD BROWN, ET AL., DEFENDANTS.

STIPULATION

IT IS HEREBY STIPULATED by the parties through their respective attorneys, that:

I. Complaint

a. If Plaintiffs were called to testify, they would testify as stated in paragraphs 4 thru 12 of the Complaint.

b. Paragraph 14 of the Complaint is admitted to read as follows:

> Defendant Harold Brown is Secretary of Defense and in said capacity he is responsible for the administration, direction and control of the Secretary of Defense. He is responsible for the policies and control of the Department of the Navy, including jurisdiction over the proposed West Loch storage facility. Defendant Thomas B. Hayward is the Chief of Naval Operations and under the control and direction of the Secretary of the Navy. He exercises command over the operations forces of the Navy. Defendant Ralph S. Wentworth, Jr., is the Commandant of the 14th Naval District, the headquarters of which is Pearl Harbor, Hawaii. In his capacity as Commandant, Defendant Wentworth exercises coordination of assigned naval shore activities within the district which includes the proposed West Loch facility. Defendant Admiral Donald C. Davis is the Commander-in-Chief Pacific Fleet and in such capacity is the recipient of funds allocated by the United States Navy for naval operations on the proposed West Loch facility. Each of the Defendants is sued solely in his official capacity.

c. Paragraphs 14, 15, 18, 23, 24, 25, 28, 29, 32, 33, 35 of the complaint are admitted by Defendants.

d. That part of paragraph 27 is admitted which states "Some or all of the species listed in Exhibit 'A' attached hereto exist on or about the West Loch facility. . . ."

e. In paragraph 30, if called to testify Plaintiff Lind would state that he "is an American citizen of Hawaiian descent whose historical and cultural foundations extend to the Okiokiolepe Fish Pond. He would also testify in paragraph 31 that the Okiokiolepe Fish Pond is of historical, religious and cultural significance to him and, he feels, other individuals of Hawaiian descent.

f. Paragraph 34 is amended and admitted to read:

> Defendants have authorized the building of the West Loch ammunition storage facility without requesting the Advisory Council on Historic Preservation to comment on the facility's effect on the Okiokiolepe Fish Pond.

II. Answer

The Defendants answer is amended to include Defendants Brown, Claytor, and Davis.

III. Prior Evidence Made A Part Of This Record

a. All persons exc. J.A. & I.L. who have made affidavits in support of the earlier Motion for Preliminary Injunction of the Motion to Dismiss or in the Alternative for Summary Judgment would testify to the matters contained therein if called to testify.

b. No objection is made to the transcript of the hearing on the Motion for Preliminary Injunction being admitted as evidence.

c. No objection is made to the environmental assessment for the West Loch facility, attached as Exhibit 'A' to Plaintiffs' Motion for Preliminary Injunction, being admitted as evidence.

d. No objection is made to the Candidate Environmental Impact Statement attached being admitted as evidence.

e. The following exhibits attached to Plaintiff's Motion for Preliminary Injunction are authentic: B thru and including K; L as a Resolution submitted but not adopted by the Hawaii State Legislature; the second page of Exhibit N; O thru Q.

f. All exhibits attached to Defendants' Motion to Dismiss or in the Alternative for Summary Judgment are authentic.

g. All exhibits that Plaintiffs plans to submit are authentic.

IV. Facts Not In Dispute

a. The West Loch ammunition storage facility is capable of storing and maintaining nuclear weapons, when, as and if needed.

b. 1. DOD has publicly acknowledged following occurrencies: On January 17, 1966, an American B–52 bomber collided with a KC–135 refueling tanker causing the deaths of crewmen and the loss of unarmed nuclear weapons.

2. On March 11, 1958, a B–47 bomber accidently dropped an unarmed nuclear weapon in the megaton range over South Carolina. A explosion of conventional explosives occurred.

3. On June 7, 1960, at McGuire Air Force Base, a fire occurred at a launch shelter of a Bomarc Missle. One missle exploded. Some radiation was scattered.

4. In 1961, in over North Carolina a B–52 bomber (had to dropped jettison) a nuclear bomb of unknown megatonage. The bomb was buried in the earth and the explosive parts were recovered.

5. On January 21, 1968, a B–52 attempting an emergency landing at a U.S. Air Force Base in Greenland crashed, breaking or destroying nuclear weapons. A radioactive contaiminated area resulted.

DATED: Honolulu, Hawaii, March 4, 1979

/s/ _____

WALTER P. ZULKOSKI
Attorney for Plaintiffs

ELLIOTT ENOKI
Attorney for Defendants

MURRAY NASH

was called as a witness by the Plaintiffs, having been duly sworn, testified as follows:

THE CLERK: State your name, address, and spell your last name.

THE WITNESS: My name is Murray Nash. I live at 10800 Blossom Lane, Silver Springs, Maryland. My last name is spelled N-a-s-h.

DIRECT EXAMINATION

BY MR. ZULKOWSKI:

Q Mr. Nash, I show you a diagram. It is dated or entitled "Statement of Murray L. Nash." Are you familiar with that document?

A Yes, I am.

Q Did you prepare it as a part of this litigation?

A Yes, I did.

Q It states in the document that you are the Deputy [214] Director, Office of Classification, Department of Energy.

A That's correct.

Q And that you are responsible for formulating the rules and regulations for the classification of scientific and technical information which may be categorized as restricted data, formerly restricted data, and national security information. Is that accurate?

A That's right.

Q Are those classifications that your office prepares, are those classifications binding on the various services, Department of Defense, the Military, Navy, Army?

MR. ENOKI: I object. It calls for legal opinion.

THE COURT: Sustained.

Q (By Mr. Zulkowski) Whenever you prepared these rules and regulations, to the best of your knowledge, who do you prepare them for?

A It is prepared for the users in the atomic energy industry.

Q That would include anyone in the atomic energy?

A Anyone dealing with classified information.

Q Regarding atomic energy?

A Right.

Q Would that include atomic weaponry?

A Yes.

Q In the course of your work, have you ever prepared [215] rules and regulations that you have sent to the departments, either the Department of Defense or the Navy?

A That I have sent to them?

Q Yes.

A Certainly. Many of those rules are jointly prepared with the department.

Q Have you been here throughout the length of this hearing, from yesterday morning on?

A Yes, I have.

Q You have heard the various testimony in the case?

A Yes, I have.

Q Were you consulted at all in the preparation of answers to an item that we served on the other side calling for the request for documents?

A No, I was not.

Q You weren't consulted at all in the preparation of that document?

A No, sir.

Q To quote from that document, we requested information regarding the highly determined radiological—excuse me—a radiation accident—radiation accident potential. Is that classified information?

A I don't know what the term means.

Q Would you be familiar with a similar term?

A I don't know what you are referring to, counsel.

[216] Q Are you familiar with the fact that whenever an ammunition storage facility is constructed, that the facility, determining where to locate the facility; two determinations are made: one, what a conventional blast arc would be, and secondly, where radiation accident potential would be?

A I don't have any knowledge about how to construct such a site.

Q In the testimony yesterday, there was a safety officer, Mr. Ornellas, on the stand and he stated that his base kept various accident reports on accidents involving the ground vehicles on the base. Would that be classified information?

A As I understood his testimony, he testified that he was only concerned with ordinary conventional traffic-type hazards and accidents. And no, that wouldn't be classified.

Q Would that be classified—should that be unclassified with regard to what those vehicles may be carrying?

A The accident per se, yes. I mean, if a car runs into a tree and you report that as an accident; there is nothing classified about it, no matter what it carries.

Q So if an accident occurs with the vehicle carrying, let's say, nuclear weapons; there is nothing preventing disclosure of the fact that that accident has happened, is there?

A Not just the accident, that is right.

Q But the details of the nuclear weapon, that is something [217] else?

A That is something else.

Q But the statistics is no problem is there?

A I don't see any.

Q What about the incidents of airplane accidents in, let's say, the State of Hawaii? Is there any reason why that should be classified information, just the statistical reports of how many occurred and over what period of time?

A I really don't know what the rules governing that is by the Department of Defense.

Q But from your personal knowledge and your personal experience, is there any reason why that should be classified?

A I know of no reason why that should be classified, just the mere occurrence of an accident, that is an airplane accident.

Q What about where that accident occurred?

A Same answer.

Q No problems with that?

A No.

Q Also, we had testimony yesterday by one of the Defendants' witnesses regarding, at least on his base, a number of, quote, nuclear incidents that occurred. I believe his statement was two a year. In fact, he described two. Is there any reason why that information shouldn't be released?

A I don't know under what sort of restrictions Capt. [218] Butrym operates. It is a hypothetical question as far as I am concerned.

Q Based on what you heard yesterday, the kind of information he did reveal, is there any reason why that information should be classified?

A I really don't know. I don't know. There are, you know—I am not trying to evade your question, but I don't want to give an answer which would be misleading. I just don't know.

Q He testified two occurred per year. Is there anything—you are the one who is in charge of determining whether this information is classified or unclassified, am I correct?

A I am charged with the responsibility, part of the responsibility for formulating rules. I am not charged with the responsibility for giving specific answers to specific questions.

Q So if you are going to formulate a rule and formulating a rule about statistics about nuclear accidents, would you formulate a rule saying that the number of incidents

that occurred in a particular year should be classified information?

MR. ENOKI: I object. Calls for a hypothetical. Posing a hypothetical fact not in evidence.

THE COURT: Let's see if the witness can answer.

A I wouldn't have any objection to that.

[219] Q (By Mr. Zulkowski) You wouldn't have any objection to that?

A No. Now, I could be pursuaded otherwise by the factors of which I am not aware; but answering that hypothetical question as you put it, I would have no objection to it.

Q In your statement you list a number of reasons of why an environmental impact statement can be done. I am assuming these are pretty blanket rules you apply here, is that accurate?

A No, they are not so blanket. What they refer to is one, we can, A, neither confirm nor deny that weapons are stored at any location; secondly, what they also say is that the design of atomic weapons is restricted data according to the Atomic Energy Act, and they can't be discussed or divulged to any third people.

Q That is the basis of your testimony?

A That's right.

Q If it has already been admitted by the Department of Defense there is a possibility of plutonium dispersal, there is no reason why the pattern of that dispersal should be anything that could be classified, assuming a minimum amount of plutonium is required for nuclear detonation?

MR. ENOKI: I object. That question is compound and ambiguous.

[220] MR. ZULKOWSKI: I will rephrase it, your Honor.

THE COURT: Very well. Do you understand the question?

THE WITNESS: No, I don't, your Honor.

THE COURT: Very well. Try again. Try again, counsel.

Q (By Mr. Zulkowski) Assuming that the defense has admitted a plutonium dispersal can occur at a nuclear weapons site and assuming that the scientific information is that the minimum amount of plutonium required to make a bomb is three hundred grams, would there be any reason to classify what effect dispersing three hundred grams of plutonium into the air would have on the surrounding area?

A I don't think I can answer that question because the speculation of how much material is necessary to make a bomb is classified in itself.

Q Again, I am assuming that that scientific evidence says there is no way you can have a nuclear explosion unless you have a critical amount, three hundred grams of plutonium?

A Right.

Q That is basically a scientific fact. We are not talking about any restricted data?

MR. ENOKI: I object to counsel testifying at this point.

THE COURT: The question is never evidence, counsel. You know that. Can you answer the question?

THE WITNESS: No. I wish he would rephrase it.

[221] Q (By Mr. Zulkowski) Okay. I will try again. Again, we have a certain amount of plutonium that is required to make a bomb.

A Right

Q That is a given. Now, if that were dispersed in the air, is there any reason why just that dispersal should be classified information?

A No.

Q That is something you could look into in the environmental impact statement.

A Unless you got into quantities, which it could not.

Q Also, the effect of a possible aircraft accident on the site, there is no reason why the possible effect of that ought to be classified?

A I don't know. I just don't know because I don't know what the effects would be.

Q What about the discussion of what possible effects could occur? Let me rephrase that.

Again, we are doing a hypothetical. Assuming a plane crashes and burns. There is no reason why an impact statement couldn't determine what would happen to the plane whenever it hit the ground, is that correct?

A That's right.

Q What effects—

A I assume it would break up.

[222] Q But what effects it may have on the surrounding area may be classified. The fact it hits the ground and explodes, it burns, whatever; there is no reason why you couldn't discuss that in the environmental impact statement?

A That's right.

Q Are you aware of the fact that on various military projects like the MX Missile System, the Triton Submarine Base, the environmental impact—

MR. ENOKI: I object. I object. This is beyond the witness' personal knowledge.

THE COURT: Do you have any personal knowledge?

THE WITNESS: I was going to say I just don't know, your Honor.

THE COURT: That is the answer.

Q (By Mr. Zulkowski) Given that we can't pinpoint because of security reasons where we keep our atomic weapons, there is no reason why we can't discuss the environmental impact if, assuming there is a possibility it may be stored in an area, is that accurate?

A That is again a very hypothetical question. That would depend on the circumstances.

Q It depends?

A We have the assessment which is part of the testimony. I think that is about as far as you can go.

Q Things have already been done?

[223] A I would say that there is a limit to which you can go.

Q That is as far as you can go, the assessement?

A Right.

Q I can't go any further than that?

A No, because I think after that you just start getting too specific.

Q That is your professional opinion?

A That is my opinion.

Q Have you had something called a candidate EIS?

A Yes, I have.

Q That has gone substantially farther than the environmental assessment, hasn't it?

A Yes, it has.

(Whereupon, Mr. Zulkowski and Mr. Albertini confer.)

Q (By Mr. Zulkowski) Are you familiar with the classification of a nuclear accident and nuclear incident?

A Not as such, no.

Q Are there other terms that you use?

A No. I know what you mean.

Q You know what I mean.

Q Yes.

A Is there any reason to classify just the occurrence of a nuclear accident?

A Personally, I don't see of any; but there may be [224] reasons that other people may have that I am not aware of.

Q Any professional—

A I don't see any reason offhand.

Q Is that the same with the nuclear incident?

A Yes.

(Whereupon, Mr. Zulkowski and Mr. Albertini confer.)

THE COURT: I take it you have no questions, counsel?

(Whereupon, Mr. Zulkowski and Mr. Albertini confer.)

Q (By Mr. Zulkowski) Are you familiar with the term formerly restricted data?

A Yes.

Q Can you just define that?

A Formerly restricted data is a rather oddball name. It refers to restricted data which the Department of Energy, formerly the Atomic Energy Commission and the Department of Defense have both jointly determined can be adequately protected as national security information when that information is in the United States. But it reverts to the former restricted data categorization if it is transferred outside the United States, say to NATO or in a national organization that we deal with. But it is really restricted data.

Q I believe it was in your statement that you mentioned that nine pages of information were declassified just for the suit?

A Yes.

[225] Q What are those nine pages of information?

A These were pages that refer to the classification rules governing the location of stockpile sites primarily and numbers of weapons stored there.

Q Do you know whether or not those are in evidence?

A I don't believe they are.

Q Would you be able to without breaching your security or your classification system discuss the effects of nuclear weapons storage site, assuming you don't admit that is going to be a site?

A I really don't understand. Discuss it in what way?

Q Discuss the possible effects of, say, a nuclear weapons detonation.

A I'm not qualified to discuss that.

Q In terms of classifying information, do you tend to or would you rather—do you tend to, say, overclassify rather than underclassify?

A No, sir. We are prohibited from doing that by Execu-

tive Order. I refer to Executive Order 12065 that specifically says that shall not be done. That is a no-no.

Q Just the way you classify—how long have you been classifying—

THE COURT: Counsel, this doesn't tend to prove or disprove any of the issues in this case. I have given you a long leeway with this expert. Let's bring your examination [226] to a close unless you get into questions that pertain to the decision I have to make.

MR. ZULKOWSKI: We have no further questions, your Honor.

THE COURT: Very well. I think that is sufficient.

MR. ENOKI: I just have one question.

THE COURT: Very well.

CROSS-EXAMINATION

BY MR. ENOKI:

Q Mr. Nash, are there other Departments of Defense, that is Army, Navy, or Air Force, reguations that also supplement the classifications that you use?

A Yes. They usually issue their own instructions to implement the general instructions.

MR. ENOKI: Thank you. I would also like to introduce Mr. Nash's testimony since it has been referred to.

MR. ZULKOWSKI: No objection, your Honor.

THE COURT: It will be received as marked. Do you have any recross on questions asked by counsel? Very well. You may stand down.

MR. ENOKI: Mr. Nash's statement marked D5.

THE COURT: D5?

MR. ENOKI: Yes.

THE COURT: Thank you. Next witness, counsel.

MR. ZULKOWSKI: My next witness I call Dr. Helen Caldicott, your Honor.

THE COURT: Very well.

Whereupon.

DR. HELEN MARY CALDICOTT,

was called as a witness by the Plaintiffs, having been duly sworn, testified as follows:

THE CLERK: State your name, your address, and spell your last name.

THE WITNESS: My name is Helen Mary Caldicott and I live at 1445 Commonwealth Avenue, West New Town, Massachusetts 02165.

Q The spelling of your last name.

THE WITNESS: C-a-l-d-i-c-o-t-t.

THE COURT: Thank you.

DIRECT EXAMINATION

BY MR. ZULKOWSKI:

Q Showing you Plaintiff Exhibit P30, Affidavit of Rosalie Bertell, John Gofman, and two chapters from your recent book; do you adopt those as accurate and true information.

A Yes, I do.

Q You had an opportunity to read over all of that, [97] haven't you.

A Yes.

THE COURT: It is all contained in Exhibit 30, counsel.

MR. ZULKOWSKI: It is, your Honor.

THE COURT: Thank you.

MR. ENOKI: Excuse me. I didn't hear.

MR. ZULKOWSKI: Documents of Bertell—

MR. ENOKI: I don't know whether the Court wants me to object now.

THE COURT: List your objections, counsel.

MR. ENOKI: Excuse me.

THE COURT: List your objections. I see there are a number of pages there. I want your objections.

MR. ENOKI: The objection is to the attachments which I believe are articles by Dr. or Mr. or Dr. Gofman, G-o-f-m-

a-n—I object on the grounds—first of all, lack of foundation, which I assume counsel will try to lay; secondly, that the witness is not qualified to adopt these as her opinions; thirdly, they are hearsay as they are Dr. Gofman's opinions; fourthly, they are irrelevant, especially in relation to the second article that deals with fallout, which I don't know what has to do with this case. Those are my objections.

THE COURT: Very well. Let's proceed.

MR. ZULKOWSKI: Your Honor, can I move this around because Dr. Caldicott wants to use the blackboard.

[98] Q (By Mr. Zulkowski) Have you read the environmental impact statement the Navy has prepared.

A I have.

Q Can you give your reaction to that statement.

A Well, I think it doesn't address adequately the problems of plutonium dissipation in the event of accident explosion or fire, nor does it address adequately the medical implications of plutonium to a populous.

Q What are those medical implications.

A I need to use the blackboard.

Q Please.

A Now, there are several problems with this from a physician's point of view. First, I think I should address the fact that it is possible that nuclear weapons can in fact, if they are dropped from airplanes or if they are burned or involved in explosions, can in fact produce a nuclear yield. According to a document published by the AEC and the Defense Department entitled "The Effects of Nuclear Weapons," which says that in the event of a crash, fire, or explosion, or other stressful situations when weapons were tested, there were at least 19 cases that produced immeasurable nuclear yields.

As these weapons are placed in the path of the major airports here, it is possible that there could occur a crash. There could be an explosion of conventional weapons [99] as they are stored near conventional weapons. And there are

conventional explosions within nuclear weapons, themselves. There could well be a fire.

And in the Department of Army, Navy, and Air Force publication of plutonium contamination standards, they talk about thermoelectric sources using plutonium 238, which is used to produce electricity.

MR. ENOKI: Your Honor, I am going to object further. This is just a statement. I think the question of counsel was how she got to the medical aspects of plutonium. I don't know how we wound up with airports and crashes.

THE COURT: Let's get back to the question.

MR. ZULKOWSKI: Your Honor, just for the Court's information, the document she originally referred to is Plaintiffs' Exhibit 17. It is already in evidence.

Q (By Mr. Zulkowski) Go into the medical implications of either an explosion or release of plutonium.

A First of all, I will talk about the medical implications of a nuclear explosion and then I will talk about the medical implications of release of plutonium on a population.

Depending upon the size of the explosion, and apparently it can be an explosion of 13 kilotons. What would that mean? There would be a large fire storm first which is medically dangerous to the people involved and secondly—

MR. ENOKI: Excuse me, your Honor. Rather than [100] object everytime this comes up, I would object to this on the grounds it is irrelevant because it assumes a nuclear detonation.

THE COURT: You may reserve a motion to strike, counsel. I don't know whether it is irrelevant or not at this point. I will entertain a motion to strike. Lets proceed.

A Thank you. If people do not die in the fire storm, then it would depend on how long the nuclear explosion was, how large the fire storm was.

People who were subjected to intense radiation, gamma radiation; there would be, depending upon the population density near the explosion, there would be quite a lot of people, depending upon the population, who would develop acute radiation illness. Now, what is that.

That was first described when the Hiroshima and Nagasaki bombs were used. What happens is that high level radiation kills the actively dividing cells of the body. And within two weeks, the hair starts to fall out; the skin is affected; and large ulcers developed. And people develop vomiting and diarrhea as the blood cells die. And as the blood cells die, they develop bleeding and/or infection and die of either one of those. That is acute radiation illness.

Five years later, depending upon the population density again, there would be an epidemic of leukemia among the [101] people exposed. Leukemia increased 30 times after the Hiroshima bomb was exploded, five to ten years after the bomb dropped.

Fifteen years later, cancers would start appearing in various organs: stomach, bowel, breast, lung, thyroid, and many other organs.

It is now 33 years since those bombs were dropped and the incidence of cancer is still rising. In other words, medically we don't know the maximum time from initial radiation exposure to the peak incidence of cancer occurring. That should be thought about from a medical point of view.

Now, the second thing is if plutonium escapes. Apparently from my reading, plutonium in nuclear weapons is in the form of the metal plutonium. If there is a fire or if this plutonium is exposed to air, it spontaneously ignites, forming tiny air crystalized particles of plutonium less than one micron in diameter. One micron is one millionth of a centimeter. That is very, very small, of a cubic centimeter.

These particles, you can't see them. They are so tiny and they are readily inhaled by people and animals.

Plutonium is the most toxic element that we know. It is man made, appropriately named after Pluto, the god of Hell, I think. And it virtually didn't exist before we fissioned uranium.

It is so toxic because it is very mutagenic. Now, [102] what does that mean? It emits radiation. There are four sorts of radiation.

There are x-rays, so you can understand what I mean. X-rays only damage you instantly. They go through your

body. They can mutate or change the genes in the cells and they can cause cancer.

There are gamma rays which are like x-rays which are emitted from radioactive material.

There are alpha rays and betta rays.

Now, you all know an atom is made of rays. Here is an atom with a central nucleus with the electrons in orbit around it like that.

Now, alpha emitting material like Plutonium, emits a large particle composed of two protons and two neutrons from the unstable nucleus. It is so heavy that it only travels a distance of 40 microns which is a very short distance; in fact, the distance of a couple of cells in the body before it stops because it is so heavy; but because it is so large, it is extremely mutagenic. In other words, it changes genes very readily. Either the cell will die or will survive with a damaged gene.

Betta radiation is electrons being emitted, which is smaller and travels further and also causes cancer.

Now, how is cancer caused by this radiation? You all know that the body is composed of billions and trillions of [103] cells. Here is a typical cell. And inside the cell is a nucleus and in the nucleus are the chromosomes and there are 46 chromosomes in the cell. And arranged on the chromosomes are the genes. You have all read about genetic engineering lately. The scientists are playing around with the genes which are really building blocks of life, essence of life. They control who we are. Plants have genes. Animals have genes. They control the color of our hair, the color of our eyes, et cetera.

In every ordinary cell in the body, there is a gene that controls the rate of cell division, called the regulator gene.

Here is a particle of plutonium, for instance, sitting here next to a cell emitting continuously. If you look at it under the microscope, it looks like a star. And just by chance, the regulator genes hit. The gene is a molecule of deoxyribonucleic acid. It is a biochemical molecule. It just changes the chemistry of the molecule. The cell does not die.

The cell sits in a latent state for 15 to 50 years, that being the latent period of carcinogens, from the time when the cell is damaged and when the person develops cancer. Remember, it took 15 years for the survivors at Hiroshima to start manifesting cancer.

What happens is one active cell is dividing to produce [104] two daughter cells from the regulator way. The cell goes beserk and produces millions and billions and trillions of daughter cells in a totally unregulated way, and that is the cancer. In other words, it takes, in fact, one atom of plutonium, one cell, and one gene to kill a person.

Now, there is a lot of documents about the toxicity of plutonium, how much will cause cancer. It is generally accepted that one microgram, a millionth of a gram, is a carcinogenic dose.

But there is some controversy about this because there is a naturally occurring alpha emitter called polonium, which is a daughter of uranium and it is in the air. It has the same sort of energy emission as plutonium.

The tobacco leaves have little hairs on them and they tend to concentrate with polonium in the air. Smokers who smoke, when they breath the smoke into their lungs—here's the trachea, the main air passage—it divides in the lungs, in the chest and the lungs. This is the right lung and the left lung. As the air passages divide, there is a lot of turbulence and bifurcations of the air passage of the air. And the polonium tends to concentrate in the mucosa just here. And people have taken the polonium that they find in the lungs—

THE COURT: Just a moment. Counsel, couldn't we all agree that in the event of a disaster in this area, that the [105] medical consequences would be catastrophic and the results wouldn't be known, entire results, known for many years?

I appreciate what the doctor is saying here; but I think when we sum it all up, it is a situation that is almost—it is catastrophic.

MR. ZULKOWSKI: The point we are trying to make, your Honor, is in the candidate EIS, it mentions the re-

lease of plutonium in the air is going to be confined as a nuclear hazard. We have substantial medical evidence to indicate that that is not the case. If it does get in the air, as our earlier witness testified, Mr. Manly, it is going to be an extremely serious hazard.

THE COURT: This is cumulative, then, counsel. I would agree it would be an extreme health hazard. I think what the doctor is saying is what I have said, it would be catastrophic.

THE WITNESS: Catastrophic.

THE COURT: And the results—I am assuming a substantial explosion and I am also assuming you wouldn't have the medical results for many years. As you say about Hiroshima, they are still finding out about this and that and proving and disproving. Your scientists haven't come to a conclusion yet.

THE WITNESS: We have a lot of results. We have a lot of conclusions, but we are finding more.

[106] THE COURT: That's right.

THE WITNESS: Could I just explain what plutonium does in the body instead of continuing with this?

THE COURT: Very well. Let's proceed.

A Some people think in effect in nanogram quantities which is a thousandth of a microgram. That is what I was leading up to with this polonium study.

If plutonium is ingested in the G.I. tract, it was thought it wasn't absorbed, but a recent article in a science magazine says if water is chlorinated and most of our drinking water is, the oxidation state of plutonium changes and it becomes a thousand times more soluble. Therefore, a thousand times more readily absorbed. It is absorbed through the gut of babies in the first four weeks of life much more readily than it is in adults.

The way it usually gets in the body is by inhalation as I just explained. It is absorbed from the lung very slowly and it enters the body and it first of all concentrates in the lymph glands in the chest. Then it enters the blood and the

body thinks plutonium is iron. So it combines with the iron transporting protein of the blood.

In that state, it cannot be filtered through the kidneys because the molecule is too large, nor is it excreted through the body. Once it gets in the body, it is there forever until the person dies, virtually.

[107] It is stored in the liver where it causes liver cancer in animals. That is how we test drugs, by testing animals. It is stored in the bone where it causes bone cancer very readily. It crosses the placenta into the developing embryo where it is so incredibly radioactive it could kill a cell in the first three months of its life that is going to be responsible for the brain, part of the heart, et cetera. That is called teratogonesis. That is what the drug thalidomide did.

It also concentrates in the testicles, ovaries, being found in the fallout. Everyone in the northern hemisphere already has a small amount of plutonium in the testicles and ovaries from fallout. Here is the large testicle with the chevials formed like this. These are the cells that form the sperm here. The plutonium is found to be lodged just next to these cells where because of its incredible radioactivity could well damage the genes.

If a sperm with damaged genes formed the conceptus, the new baby, either the gene is damaged in the dormant way or the baby will be deformed or abort spontaneously or more likely, there will be a recessive gene and we all carry abnormal recessive genes that we hand on from generation to generation. We look okay, but it is not until you marry someone with this same abnormal recessive gene like diabetes, cystic fibrosis, et cetera that the gene will express itself.

[108] Plutonium is very mutagenic and actually locates in the reproductive organs and is very serious from a pediatric point of view. It is also very serious because babies and young children are 10 or 20 times more sensitive to the effects of radiation and, of course, plutonium than adults.

So therefore, from a medical point of view, this situation here in this island constitutes great medical problems and

in the health plan environmental section, they talk about accidental spill of nuclear material. They say the State's radiological incidence control plan calls for training of local health and safety personnel in handling of such disaster; but in reality, the agencies involved, Fire Department, Police Department, Civil Defense, hospitals, have no practical knowledge of proper techniques.

In fact, with plutonium inhalation, there is really nothing which one can do. The lungs are lavaged or washed out. There is an agent, EDTA, which removes a little of the plutonium, but not much. It tends to really stay in the lungs and it is almost impossible to remove most of it.

So this is a very, very severe medical problem, and plutonium is one of the most or probably the most toxic material that I have ever read about and it has a half life of 24,400 years which means that it is biologically dangerous and poisonous for half a million years. If it gets into the biological cycle, you can never treat it and get it back.

[109] If there was a fire with smoke, the smoke dissipates to nobody knows where. The particles, as I explained, are extremely small. You can never retrieve them. And also, it says in one of the environmental impact statements, it is very difficult to measure alpha rays, which is what plutonium is. It is difficult to measure them anyway.

THE COURT: Will you return to the witness stand, Doctor. Return to the witness stand, please. Proceed, counsel.

Q (By Mr. Zulkowski) Are you finished.

A Yes. Once it gets out—once it escapes in the environment, we can't retrieve it.

MR. ZULKOWSKI: Do you want to add anything?

MR. ENOKI: I thought we agreed—

MR. ZULKOWSKI: I have no problems. She can be back for cross-examination tomorrow. I thought if you had—

MR. ENOKI: I don't have any right now.

THE COURT: Is that satisfactory for you to return.

THE WITNESS: I think so.

THE COURT: You may stand down. Call your next witness, counsel.

MR. ZULKOWSKI: I would like to put in again a number of other exhibits. I am not clear whether or not the candidate environmental impact statement is in the record. No copy was given to Judge Wong, but I understand it to be with the proviso so that it would not be a part of the record.

AFFIDAVIT OF ROSALIE BERTELL

STATE OF HAWAII }
HONOLULU, HAWAII } ss:

ROSALIE BERTELL, being duly sworn in, deposes and says:

Since citizen participation in the decision to locate nuclear weapons at West Loch, Hawaii, is effectively curtailed by their inability to finance travel costs for expert witnesses, I would like to assist them insofar as I can through this affidavit. If I had been able to appear to testify in person, the following statements would have been the main concerns addressed.

There is an obvious conflict between the pursuit of the goals of the United States Navy and the recognition of the serious health hazard posed by the handling, transporting, storing (and accidental detonation of nuclear material.) To quote from the CANDIDATE ENVIRONMENTAL IMPACT STATEMENT, NUCLEAR ASPECTS OF NAVAL WEAPONS SYSTEMS STORAGE, of 28 Mar. 1979: "Storage sites ashore are a necessary, irreplaceable segment of the national defense capability." This mindset leads to such ridiculous statements as the one on page 4:

> In the event of a high explosive detonation, some plutonium material could be spread about the immediate area of the accident. This material will not cause radiological damage to personnel, regardless of one's proximity, if kept outside the body.

Since plutonium is an alpha emitter, this is a true statement on the surface; but there is no indication of the Navy's inability to retrieve this deadly material, no indication that the plutonium will eventually leave the immediate area of the accident and—by entering into the water system and becoming airborne on dust particles—enter into human bodies. It is in fact impossible to keep the plutonium "outside of the body" once it is in the air, water and food supply. Implying otherwise constitutes a cruel deception of the public with respect to a very potent carcinogen.

The next paragraph reads:

> Burning weapons, conventional or nuclear, may produce toxic or caustic gases. In addition, if plutonium is involved in fire, radioactive particles will accompany the toxic or caustic gases in the smoke cloud. However, such smoke clouds are limited to the accident scene, quickly dissipate, and may constitute an internal hazard to personnel at the scene. The smoke should be avoided.

This is comparable to "solving" a drowning man's problem by telling him not to inhale water! This is a completely unrealistic approach to a serious problem.

> Navy nuclear weapon units and facilities are fully equipped and trained to successfully contain and remove any hazards or potential hazards that might result from an accident with a nuclear weapon. These response teams are regularly exercised and evaluated on this capability.

Either this statement is a blatant lie, or there is some technical definition of "hazard" contrary to the usual meaning of the term! Radioactive material involved in a nuclear accident cannot be completely removed from the environment once it is released. If this were possible, then international concern for buildup of radioactive material in the environment raised by the United Nations Scientific Committee on the Effects of Ionizing Radiation in its 1977 report would not have been voiced. (1)

For the past year, a Department of Energy Task Force has functioned with a budget of one million dollars to find some way of removing the radioactive material which has contaminated the West Valley nuclear waste dump in New York State. (2) This material was derived almost exclusively from the nuclear weapon industry. Estimates of up to one billion dollars for the actual cleanup have been made. However, it is clear that the technology for the cleanup has never been tried, nor can it be promised that citizens can ever again be allowed access to this prime New York State dairy and agricultural land. The pollution there is from handling of radioactive materials, not from an accident situation.

The United States Navy, while it seems quite satisfied with its own efforts to protect health and safety, is now under investigation because of the increased incidence of leukemia among nuclear submarine workers. This increased risk was reported by Dr. Thomas Najarian at Boston Veterans' Hospital. (3) It was not discovered by the U.S. Navy, which has not even undertaken an adequate epidemiological study of its personnel to test predicted health effects against reality.

Two recent Congressional hearings (4, 5) have dealt with the under-estimation of the health effects of exposure to low-level radiation, and a Presidential order is now in effect to the Department of Health, Education, nd Welfare to investigate the handling of research into these effects. I am enclosing a copy of the Presidential order (Exhibit II) with this affidavit.

There are also two petitions pending beforre the U.S. Nuclear Regulatory Commission for an adjudicatory hearing to reduce the permissible levels of radiation exposure for workers in the nuclear industry. Two major epidemiological studies, the Hanford Study and the Tri-State Leukemia Survey, which measure actual health effects at low-level exposures, have challenged the industry and government predictions of "no harm" made previously by "educated guess." From my own research on the Tri-State Survey (Exhibits III and IV), I have no doubt that such optimistic forecasts were wrong. A copy of my petition to the N.R.C. (Exhibit V) is included with this affidavit.

The position of the U.S. Navy, namely, that low-level radiation poses no threat to the environment, to personnel, or to the people of Hawaii, (p. 5 of Naval Report) is untenable today.

Although for purposes of setting radiation safety standards only two health effects of exposure to ionizing radiation were considered, namely, death from cancer and severe genetic disease among the first-generation live-born offspring, the real world imposes its truth in totality. These are not the only health effects which occur. Radiation damages cells—either somatic cells or genetic material—and

causes changes in the DNA and RNA within the cells. This vital material governs the body's ability to adjust to its environment, to restore health after sickness, to prevent runaway cellular growth which can become cancerous, and to restore physiological balance under any stress conditions. Chronic exposure to ionizing radiation can be expected to undermine these body regulatory mechanisms in slow subtle ways, increasing the rates of cancer and birth defects, accelerating the aging process and causing the chronic diseases to appear at an earlier age. Since this radioactive material is undetectable by the human senses, since it enters into body chemistry and can be incorporated into tissue and bone, and since it is taken into the body through breathing, eating, drinking and bathing, there is no defense against it. All persons—whether children or adults, healthy or sickly —are at risk.

The location of a nuclear weapon base near Honolulu, a highly populated center and tourist attraction, poses inevitable long-term health effects for the residents. In addition to these, a serious accident could easily render the area uninhabitable, pollute the vegetation and aquatic life beyond rescue, and require displacement of the population as was mandatory (after much human suffering) at Bikini. (6) Even with no serious accident, the transportation, handling (and replacement) of nuclear materials can be expected to cause low-level exposures to the population via some penetrating gamma radiation and releases of radioactive materials into the air, land and water supply. The State of Hawaii does not seem to be prepared to carefully monitor subtle changes in the public health due to these exposures. For example, there is no evidence that a careful study of the age at onset of heart disease or diabetes in the population has been undertaken. The moving up of age-of-onset to younger years is a delicate indicator of the beginning of a deteriorating public health situation. Having an adequate and sophisticated health monitoring system would also provide the State with legal documentation of the health status of the population prior to the moving in of nuclear weapons, useful later if or when change was noted. Instead of such careful health monitoring, the population seems to be ex-

pected to accept the word of the Navy that no harm will be caused, and then subsequently to accept the Navy's later judgment, if or when harm is found, that it could not have been caused by the presence of the weapons! The people of Hawaii, like the uranium miners, the people of Grand Junction, Colorado, the military men who participated in the nuclear explosions, the people of Nevada and Utah, and many others now trying to obtain some redress in the U.S. Courts, will be helpless.

The immediate purpose of this affidavit is to alert the State of Hawaii to the rashness of entrusting questions pertaining to the health and safety of the people to the judgment of the U.S. Navy, which obviously has other more compelling commitments.

I would also like to raise the question of humans using weapons against their brothers and sisters which kill and maim for generation upon generation, and which destroy our life-support system, the fragile fabric of the earth. The God who made both the butterfly and the baby hardly wants them so cruelly and surely destroyed! Nuclear weapons will destroy those who make them, transport them, store them and use them, just as surely as they destroy those against whom they are used. The world is one ecosystem and pollution cannot be contained within national or state boundaries. Neither is there any way for humans to cease breathing, eating, drinking or bathing—all ways in which this nuclear material enters into the body.

Hawaii, one of the delightful natural habitats of the world, should not be allowed to become another nuclear disaster area. Reckless endangerment of the Islands, their people and their economic viability is too great a price to pay for some nebulous ill-conceived and unproved military security scheme.

Exhibits:

I Curriculum Vitae
II Memo from White House to DHEW
III "X-ray Exposure and Premature Aging"
IV "Measurable Health Effects of Diagnostic X-ray Exposure," Testimony before the Subcommittee on Health

and the Environment, U.S. House of Representatives, July 11, 1978

V Petition to the Nuclear Regulatory Commission

References:

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2. Western New York Nuclear Service Center Study Final Report for Public Comment: TID–28905–1 and Companion Report: TID–28905–2. U.S. Department of Energy. November 1978.

3. Mortality from Leukemia and Cancer in Shipyard Nuclear Workers by Thomas Najarian. The Lancet, May 13, 1978.

4. Proceedings of a Congressional Seminar on Low-Level Ionizing Radiation. A Report submitted by the Sub-Committee on Energy and the Environment of the Committee on Interior and Insular Affairs, U.S. House of Representatives. Nov. 1976. (79–767 0)

5. *Ibid.*, #4. February 10, 1978. In Press.

6. A Twenty-Year Review of Medical Findings in a Marshallese Population Accidentally Exposed to Radioactive Fallout by Robert A. Conard. Brookhaven National Laboratory, BNL 50424, September 1975.

/s/ _____
ROSALIE BERTELL, PH.D., G.N.S.H.
1/15/79

_____
Date

Subscribed and sworn to before me this 15 day of January, 1979.

/s/ _____
DAVID J. NARDOZZI
Notary Public, State of New York
Qualified in Niagara County
My Commission Expires March 30, 1979

SISTER ROSALIE BERTELL
CURRICULUM VITAE

Born April 4, 1929, Buffalo, New York

Member of a Roman Catholic Religious Community since September 1951

EDUCATION	*Degree*	*Date*	*Field*
D'Youville College, Buffalo	B.A.	1951	Mathematics
Catholic University of America, Washington	M.A.	1959	Mathematics
Catholic University of America, Washington	Ph.D.	1966	Mathematics

POSITIONS HELD

Energy/Public Health Specialist	Global Education Associates (UN Non-Governmental Orgzn)	8/78-present
Biostatistical and Radiation Health Consultant		6/78-present
Assistant Research Professor, Graduate School	State University of NY at Buffalo	1974–78
Senior Cancer Research Scientist	Roswell Park Memorial Inst, Bflo	1973–6/78
Associate Professor, Math Dept.	D'Youville College, Buffalo	1973
Cancer Research Scientist II	Roswell Park Memorial Institute	2/71–1973
Cancer Research Scientist I	Roswell Park Memorial Institute	6/70–1971
Visiting Professor	State University of NY at Buffalo	1972–1973
Coordinator of Inst. Research	D'Youville College	1/71–1972
Assistant Professor, Math Dept.	D'Youville College	1/69–1972
Coordinator, High School Math Teachers, Diocese of Atlanta	D'Youville Academy, Chamblee, Ga	1/68–1/69
Registrar	Sacred Heart Jr College, Yardley, Pa	9/58–1/68
Associate Professor, Math Dept.	Sacred Heart Jr College, Yardley, Pa	9/58–1/68
Graduate Assistant	Catholic University, Washington	9/57–1/58

MEMBERSHIPS AND COMMITTEES

American Academy of Political and Social Sciences
American Association of University Women
American Public Health Association
Consultant, New York State Medical Society, Committee on Environmental Quality
Consultant, Wisconsin State Medical Society, Committee on Health and the Environment
Energy Task Force, National Council of Churches
Institute of Society, Ethics and the Life Sciences
International League of Women for Peace and Freedom
Kappa Gamma Pi
Member, Environmental Health Committee, British Columbia Medical Association
National Assembly of Women Religious
New York Academy of Science
Sigma Xi
The Biometric Society

ACADEMIC AND PROFESSIONAL HONORS, SCHOLARSHIPS, TRAINEESHIPS

Scholarship (4 years at D'Youville), graduated Magna Cum Laude
Kappa Gamma Pi, Sigma Xi, Graduate Assistantship (Catholic University)
National Institute of Health Grant (3 years at Catholic University); Post Doctoral Summer Research

American Catholic Who's Who 1977, 1978
Community Leaders and Noteworthy Americans 1977
Dictionary of International Biography 1976–77, 1978–79
Grey Nuns' Legislative Chapter, Elected delegate, 1971, 1974, 1975
International Who's Who in Community Service 1978
International Who's Who of Intellectuals, Vol. II 1978
National Assembly of Women Religious: House of Delegates 1973 to present, National Executive Board 1977–80

Notable Americans 1976–77, 1978
Notable Americans of the Bicentennial Era 1976
Notary Public, Commonwealth of Pennsylvania 1966–70
Outstanding Civic Leader of America Award 1970

Outstanding Educators of America, elected 1973
Reader for Advance Placement Calculus Examination, Educational Testing, Princeton 1971, 1972
Sisters Assembly Executive Board: Buffalo, 1971–present
New York State, 1973–present
Who's Who in American Scientists 1973–77
Who's Who in American Women 1975, 1976, 1977, 1978, 1979–80
Who's Who in Health Care 1977
Who's Who in the East 1977
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2. Introduction to Creative Mathematics, (Book) Edwards & Sons, 1971.
3. "Pets and Adult Leukemia," Am. Journal of Public Health, co-authored with Dr. Bross and Dr. Gibson, November 1972 (Vol. 62).
4. Contributed Paper: San Diego Biomedical Symposium, "Relative Risk and Other Population Parameters." January 1973.
5. Manual for Users, Relative Risk Program, theoretical design for and description of the computer program, 1973, with Chandu Rathod, Department of Biostatistics, Roswell Park Memorial Institute.
6. Relative Risks for Combinations of 2×2 Tables, a program for the Monroe 1860 Calculator, with L. E. Blumenson, 1973, Department of Biostatistics, R.P.M.I.
7. Relative Risks When there are Several Levels of Exposure, a program for the Monroe 1860 Calculator with L. E. Blumenson, April 1973, Department of Biostatistics, R.P.M.I.
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9. Contributed Paper: ENAR Meeting of the Biometric Society, "Extensions of the Relative Risk Concept," May 1973.
10. Contributed Paper: The Mathematical Association of America, "Testing Whether a Multinomial Distribution is a Binomial Distribution of Order k," May 1974.
11. Theoretical Description of "Sister Test," Fastfortran (Conversational Ver. 4) Program, May 1974, with L. E. Blumenson, Department of Biostatistics, R.P.M.I.
12. "Nuclear Suicide," America, Vol. 131, No. 12, 1974.
13. "You are Needed," Encounter, Vol. 3, 1974.
14. "Dubious Victory," Baltimore Sun, August 12, 1974.
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22. "Scientist questions some PP&L Claims," Letter to the Editor, Harrisburg Evening News, May 16, 1975.
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39. Testimony before the Nuclear Regulatory Commission in the matter of Boston Edison Company et al., Pilgrim Nuclear Power Station Unit 2, Docket Number 50-471, Cambridge, Massachusetts, April 19, 1977.
40. Testimony before the Nuclear Regulatory Commission in the matter of the application of Public Service Company of Oklahoma, et al. for Black Fox Nuclear Generators Units 1 and 2, Docket Numbers STN-50-556 and STN-50-557, Tulsa, Oklahoma, August 24-25, 1977.
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44. The Ethical Problems Involved in Nuclear Generation of Electricity. An invited address delivered at the Energy Symposium, May 13, 1978, sponsored by the Irish Transport and General Workers Union in Dublin, Ireland.
45. Health Hazards Involved in the Production, Storage and Use of Nuclear Weapons. Invited address, Japan International Congress Against A- and H-Bombs. Osaka, Japan. August 1978.
46. Part 16 and Part 17, CBS-TV Summer Session: Alternative Futures (29 minutes each), June 1978. Video tapes available from Global Education Associates, 552 Park Avenue, East Orange, NJ 07017.
47. Testimony before the Energy Facility Siting Council of the State of Oregon, August 23-24, 1978.

48. Energy and Health. Article in The Social Costs of Energy Choices, a special issue of Christianity & Crisis, vol 38, no 15, October 15, 1978.

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50. Testimony Relative to Human Health and Nuclear Generation of Electricity. Discussion Texts, International Study Days for a Society Overcoming Domination, September 1978, d24.

AFFIDAVIT OF HOWARD B. MORLAND

STATE OF HAWAII

HONOLULU, HAWAII

HOWARD B. MORLAND, being duly sworn in, deposes and says:

On the basis of evidence presented by Catholic Action of Hawaii/Peace Education Project concerning the presence of nuclear weapons on Oahu, and on the basis of U.S. Navy documents describing the relocation of certain functions of the Navy's Lualualei Magazine from its Waikele Branch to its West Loch Brance, I am prepared to make the following statement:

> The nuclear weapon storage and maintenance facilities now under construction at West Loch, near Pearl Harbor, pose a serious threat to the health and safety of the people of Hawaii.

In support of this statement I will cite only the greatest of several hazards involved in the storage and, particularly, in the maintenance of nuclear weapons at West Loch. That hazard is the possibility of what the government calls "accidental or unauthorized detonation" of a nuclear weapon. In other words, a nuclear weapon at West Loch could explode with a fireball, a shock wave, a mushroom cloud, and deadly radioactive fallout. The consequences of such an incident would depend on the size of the explosion and on the direction of the wind, but it could easily be the greatest disaster in American history. Fallout would probably cause more casualties than blast and fire.

I. HOW LIKELY IS THE ACCIDENTAL OR UNAUTHORIZED DETONATION OF A NUCLEAR WEAPON AT WEST LOCH? Consider the following facts:

1. All nuclear weapons must undergo regular periodic field maintenance for inspection and replacement of batteries, rubber seals and gaskets, parachutes, and parts containing the radioactive isotope of hydrogen, tritium. This field maintenance involves partial disassembly and reassembly of the weapon.

2. The Special Weapons Division of the Waikele Branch of the Naval Lualualei Magazine has a technical mainte-

nance and repair officer and a weapons *assembly* officer. "Special weapons" is a euphemism for nuclear weapons. At West Loch, Building 440 contains a "MK 44 Shop" and a "MK 48 Shop". The Mark 44 is a nuclear warhead for the ASFOC missile, and the Mark 48 is a nuclear artillery projectile. It is reasonable to assume that field maintenance involving the disassembly and reassembly of nuclear weapons take place at Waikele and West Loch.

3. Nuclear weapon disassembly requires that any self-destruct mechanisms, intended to inhibit the unauthorized use of the weapon, be dismantled or bypassed. During field maintenance, a nuclear weapon is particularly vulnerable to accidental or unauthorized detonation because its fail-safe features are disabled and because the weapon is in the hands of people who know how it works and who have whatever special tools may be required to remove and replace parts.

4. Nuclear weapons have been deployed for years with known mechanical defects. On December 1, 1978, Department of Energy officials admitted that three quarters of A-1 model Polaris nuclear warheads deployed in the mid-1960s were defective and were probably duds. It took several years to correct the deficiencies, and more than a decade for knowledge of the deficiencies to become public. If nuclear weapons are mechanically defective in ways that make them easy to detonate accidentally, such information will certainly be kept from the public. While the *deliberate* unauthorized detonation of a nuclear weapon would entail a serious failure on the part of the military's "Human Reliability Program," the chance of *accidental* detonation during maintenance could be increased by mechanical defects in the weapons.

5. Finally, nuclear weapons on Oahu are a potential target for terrorists. The federal government is increasingly concerned about the possible theft or sabotage of nuclear weapons. There are probably dozens, perhaps hundreds, of people on Oahu who know how to gain entry to nuclear weapons storage and maintenance areas and who know how the weapons operate. Not all of them are on active military

duty. If one of these people is bribed, blackmailed, or kidnapped by an organization wishing to steal a weapon and set it off, the success of the mission will be enhanced by inside knowledge provided by the victimized person. If that person is part of the organization, the chance of success is enhanced still further.

II. WHAT WOULD BE THE CONSEQUENCES OF AN ACCIDENTAL OR UNAUTHORIZED NUCLEAR WEAPON DETONATION AT WEST LOCH? NUCLEAR WEAPON EFFECTS ARE NOT ENTIRELY PREDICTABLE, AND SOME OF THE KNOWN EFFECTS ARE CLASSIFIED INFORMATION. There is, however, enough public information available in Civil Defense publications and other government documents to make the following statements:

1. Contrary to the usual assumption, radioactive fallout from a nuclear weapon detonation at West Loch will *not* normally travel west with the prevailing surface trade winds. Upper level winds, not surface winds, determine the direction of fallout from a nuclear explosion. In Hawaii, prevailing upper level winds, above a twenty-thousand foot altitude, travel eastward from Pearl Harbor toward the city of Honolulu, opposite the direction of the surface trade winds. They then continue, forty percent of the time, directly toward the neighbor islands of Molokai, Lanai, Manui, Kahoolawe, and Hawaii. More than half the population of the state could die of radiation sickness following a nuclear weapon detonation at West Loch, if wind conditions are typical.

2. If the weapon is a "small" tactical weapon with an explosive yield of twenty kilotons, the size of the weapon used at Nagasaki, the region of lethal effects from blast and fire will be confined to the western parts of Pearl Harbor and Hickham Air Force Base. There will be few survivors inside a seven square-mile circle lying within one and one-half miles of the explosion. For the most part that area is sparcely populated, except on its eastern and southern perimeters where several thousand military men and their families live.

3. However, radioactive fallout from a twenty-kiloton explosion will cover an additional ten square miles within which few people will escape death from radiation sickness. This ten square mile area is likely to extend eastward from West Loch to Diamond Head, encompassing the rest of Hickham Air Force Base, the International Airport, and most of downtown Honoluiu, Kaimuki and Waialae-Kahala. Virtually everyone on Oahu southeast of the airport will suffer radiation sickness to some degree, assuming typical wind conditions. Well over a hundred thousand people will die, perhaps many more. Weeks will pass before the radioactivity has diminished sufficiently to allow removal of the bodies.

4. If the weapon is a 'large" tactical weapon with an explosive yield of one megaton, the zone of lethal blast and fire effects is more difficult to predict. Such a weapon has never been exploded in a populated area. Tests in the Marshall Islands in the 1950s indicate there will be few survivors within five-miles of West Loch. A five-mile radius from West Loch includes all of Pearl Harbor, Hickham, Aiea, Pearl City, Waipahu, Fwa, and Ewa Beach. Casualties from flash burns, fire, and broken glass will occur eight to ten miles from West Loch, as far away as Waikiki. Motorists will be temporarily blinded anywhere on southern Oahu. Many will wreck their vehicles, blocking roads and highways.

5. The mushroom cloud from a one megaton explosion an West Loch will be fourteen miles high and twenty miles wide, with its base ten miles above the ground. Viewed from a distance, it will have the appearance of a giant Frisbee, covering the island from Diamond Head to Nanakuli, and seemingly supported by a thin stem of smoke rising from Pearl Harbor. As the stem falls back to earth, the cloud will move toward Molokai and Maui. Inside its churning whiteness will be several thousand tons of pulverized soil and sand, along with sixty-five pounds of radioactive fission products—twenty-five times the corresponding amount for the "smaller" twenty-kiloton weapon. These sixty-five pounds of gaseous fission products, equivalent in radioactivity to two million tons of radium, will attach

themselves to the soil and sand in the cloud and fall back to the ground, assuring the death of anyone on southern Oahu who delays more than a half-hour in finding suitable fallout shelter. Most houses and apartments will be useless. It is hard to imagine that many people will survive in or near Honolulu or its southeastern suburbs.

6. Ironically, the fallout fatalities from a one-megaton explosion may *not* be many times greater than those from a smaller twenty-kiloton explosion. A small part of the fallout from the larger weapon will simply overkill the southern Oahu population, which is most of the state's population. Then, much of the deadly white ash will land in the ocean. The neighbor islands will have one or two hours' warning of the impending danger, if the upper level wind is blowing their way. The five thousand people on Molokai can possibly avoid death by crowding into several irrigation tunnels and staying there for two weeks—if they all get the word in time. On Lanai, two thousand people will need to share six hundred questionable fallout shelter spaces in tunnels and wells. Maui island may suffer heavy casualties, but most victims on Maui will recover from their symptoms within a few weeks even without shelter. However, a plague of thyroid cancers will appear among survivors. Any of the islands southeast of Oahu, including Hawaii, may be contaminated badly enough to require evacuation of all or part of the island, perhaps for a long time, but most of the fatal casualties will occur in or near Honolulu, or Oahu.

7. The State Civil Defence organization requires twenty-four hours to publish and distribute its tabloid newspaper telling people where to go and what to do about fallout. It might take a half-hour to get the emergency broadcast system on the air. An accidental detonation at West Loch will allow no such time for the Civil Defense apparatus to be activated. A completely uniformed civilian population will thus have no idea how to protect itself. Casualty estimates based on the optimistic assumption that much of the population will be sheltered are not valid in the case of a nuclear weapon detonation without warning.

8. Finally, one can imagine that the sudden destruction of America's fiftieth state with a nuclear weapon could be

the spark that sets off an accidental thermonuclear war between the USA and the USSR, especially if it occurs during a period of international tension, which is precisely the time it is most likely to occur.

In conclusion, the detonation of a nuclear weapon, large or small, at West Loch will be the greatest conceivable natural or man-made disaster that could befall Hawaii. No rational national defense goal requires the enormous risk of having nuclear weapons stored, inspected, or repaired, on the island of Oahu.

Name: Howard Morland

Birth: September 14, 1942; Birmingham, Alabama

Education:

1975 Dartmouth College (New Hampshire), Thayer School of Engineering; one year of post-graduate study

1974 Aeromarine Flight School (Honolulu, Hawaii): Airline Transport Pilot Certificate

1967 Reese AFB (Texas): USAF Pilot Training School, graduate

1967 Tinker AFB (Oklahoma): C-141 Pilot Transition Course, graduate

1965 Emory University: B.A. Economics

Employment:

Present Madison, Wisconsin: *The Progressive* magazine), 408 W. Gorham St.: writer on nuclear weapons

Past Honolulu, Hawaii: commercial air taxi pilot Leban, New Hampshire: flight instructor New York City, New York: *Flying* (magazine), 1 Park Avenue: writer

LIST of EXHIBITS

A1 West Loch aerial photo

A2 Acknowledged "Maintenance / Inspection shop" at West Loch

B Evidence of Nuclear Weapons at West Loch + Waikele

C1 Shipment regulations for "tritium reservairs" and other "limited life components"

C2 Location of tritium components in an H-bomb

D-1 through D6 Examples of combination locks on nuclear weapons which maintenance personnel must bypass to work on weapons

E Weapons with mechanical defects

F1 through F3 Psychological stability of persons with access to weapons

G1 through G5 Graphic display of effects of "unauthorized or accidental" detonation of nuclear weapons during maintenance, assuming typical wind conditions.

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF HAWAII

Civil No. 78–0085

CATHOLIC ACTION OF HAWAII/PEACE EDUCATION PROJECT, ET AL., PLAINTIFFS,

v.

HAROLD BROWN, ET AL., DEFENDANTS.

PREPARED TESTIMONY OF HOWARD MORLAND

Runway 8-Left at Honolulu International Airport, the principal instrument landing runway, should be closed to landing traffic whenever nuclear weapons are present at the West Loch Branch of the Lualualei Naval Magazine. The final approach course to runway 8-Left passes within one mile of the forty eight nuclear weapon storage bunkers at West Loch. The runway itself is two miles away.

Airplanes on landing approach to runway 8-Left are typically at an altitude of 700 feet when they pass abeam West Loch. The risk of radioactive contamination to a large area of Oahu in the event of an airplane crash at the nuclear weapon facility is an unacceptable risk for the people of the State. The two land uses—runway final approach course and nuclear weapon storage—are incompatible.

Furthermore, the airspace above the West Loch nuclear weapon handling areas should be formally designated a Prohibited Area. There is presently no federal airspace restriction associated with West Loch. Since the nuclear weapon facility lies *inside* the Honolulu Airport Traffic Area, and its location is not marked on air navigation charts, there is no reason for pilots to avoid directly overflying the facility.

The Pantext Plant near Amarillo, Texas, where all of America's nuclear weapons are assembled before delivery to the Department of Defense, is covered by an FAA-designated Prohibited Area. The West Loch facility, as a

nuclear weapon maintenance and assembly shop, should be similarly protected.

The personal experience on which I base these judgments is as follows:

a. As an airplane pilot I have made close to one thousand landings at Honolulu International Airport during the past twelve years, in both civilian and military airplanes. I have landed at Honolulu as a co-pilot acting as pilot in command of Air Force C-141 jet transports and as a civilian student pilot, instructor pilot and commercial air taxi pilot. As a result of flight training and flight examinations at Honolulu International Airport I have been issued an Airline Transport Pilot Certificate, as well as flight ratings for multi-engine airplanes and for instrument flight instruction. I am familiar with the patterns of air traffic at Honolulu and with the terrain surrounding the airport.

b. For the past six months I have conducted research on nuclear weapon production, at the invitation of the Department of Energy. As a free-lance writer on assignment for *The Progressive* magazine, I am writing a series of articles on nuclear weapon production. The first article of the series, on the subject of tritium, or radioactive hydrogen, is appended to this testimony.

I. On March 21, 1967, a fully armed Hawaii Air National Guard F-102 crashed on approach to Honolulu runway 8, which is now called runway 8-Left. The pilot bailed out exactly abeam-and one mile distant from-the present site of forty eight nuclear weapon storage bunkers at West Loch. With its engine dead and with no one at the flight controls, the airplane glided straight ahead one mile and crashed into Pearl Harbor channel, narrowly missing the residential area at Iroquois Point. A gust of wind, or a quirk of fate, could have turned the pilotless airplane north, toward West Loch. Traveling at close to two hundred miles per hour, and weighing 22,000 pounds, the disabled fighter plane loaded with rockets and guided missiles would have destroyed any building it hit.

The accident on March 21, 1967, is one of *Three* crashes of fully armed F-102 fighter aircraft at Honolulu in the past

twelve years. In all three cases, the airplanes were on approach to Honolulu International Airport when the pilots bailed out.

Short of an accidental or unauthorized detonation of a nuclear weapon, there can be no accident at a nuclear weapon storage and maintenance facility worse than an airplane crash. And yet, the new nuclear weapon facilities at West Loch are located beneath some of the world's most conjested airspace. Within five miles of West Loch are three airports: Barbers Point, Ford Island and Honolulu International.

Air traffic at Barbers Point Naval Air Station includes anti-submarine warfare patrol planes, fighter planes, and U.S. Army helicopters. Civilian flight training is the major activity at the Ford Island airfield. Traffic at Honolulu International Airport includes all military transport and fighter planes operating through Hickam Air Force Base (which has no runways of its own), both overseas and local commercial jets, inter-island air taxi and sightseeing aircraft, crop dusters, helicopters, and civilian flight school and rental aircraft.

Airplanes approaching Honolulu International Airport from the north and west routinely overfly airplanes in the Barbers Point and Ford Island traffic patterns. Honolulu International Airport normally conducts simultaneous landing operations on three intersecting runways, 8-Left, 4-Left, and 4-Right, requiring that airplanes destined for different runways fly intersecting courses with their flight paths separated only by altitude. Pilots approaching the airport and navigating the traffic patterns must therefore follow complex flight instructions many of which are unique to Honolulu and some of which are issued on the spot by tower controllers.

The midair collision in September of 1978, in San Diego, between a single engine airplane and a commercial jet, has given impetus to the search for a "reliever airport" on Oahu for small planes. Even if one is found, however, several factors will assure a varied mix of airplane types and a high volume of air traffic will persist at Honolulu International.

Oahu Island will continue to dominate the State's economy, and the limited land area on Oahu will continue to dictate crowded skies, especially in the vicinity of the State's major airport.

If the West Loch nuclear weapon maintenance and storage facility is actually utilized as a nuclear weapon base, the runway which brings air traffic within one mile of West Loch, runway 8-Left, should be closed to landing traffic.

II. In places where artillery firing, military air maneuvers, or other such hazards to flight exist, the FAA designates Restricted Aeas, prohibiting flight at certain altitudes and during certain times. There are thirteen Restricted Areas in the Hawaiian Islands, covering such places as Kahoolawe Island and Schofield Barracks.

In places where airplane flight constitutes an unacceptable hazard to people on the ground the FAA designates Prohibited Areas. There are only six Prohibited Areas in the entire United States. One covers the White House and the Capitol in Washington, D.C. Another covers the Rocky Mountain Arsenal in Denver, Colorado. A third covers the Pantex plant near Amarillo, Texas, where all of America's nuclear weapons are assembled by the Department of Energy before delivery to the Department of Defense.

As a nuclear weapon maintenance facility, West Loch is also an assembly point, since the weapons must be assembled following maintenance. If the Pantex Plant in Texas is covered by a Prohibited Area, the airspace over the West Loch facility should be similarly designated.

There are persently no restrictions against flight directly over the West Loch facility, other than those which normally apply to flight over populated terrain and within airport traffic areas.

III. An Air Installations Compatible Use Zones (AICUZ) study has been completed for the Barbers Point Naval Air Station. No such study has been done for Honolulu International Airport, but I have applied the principles used in the Barbers Point study to the Honolulu Airport.

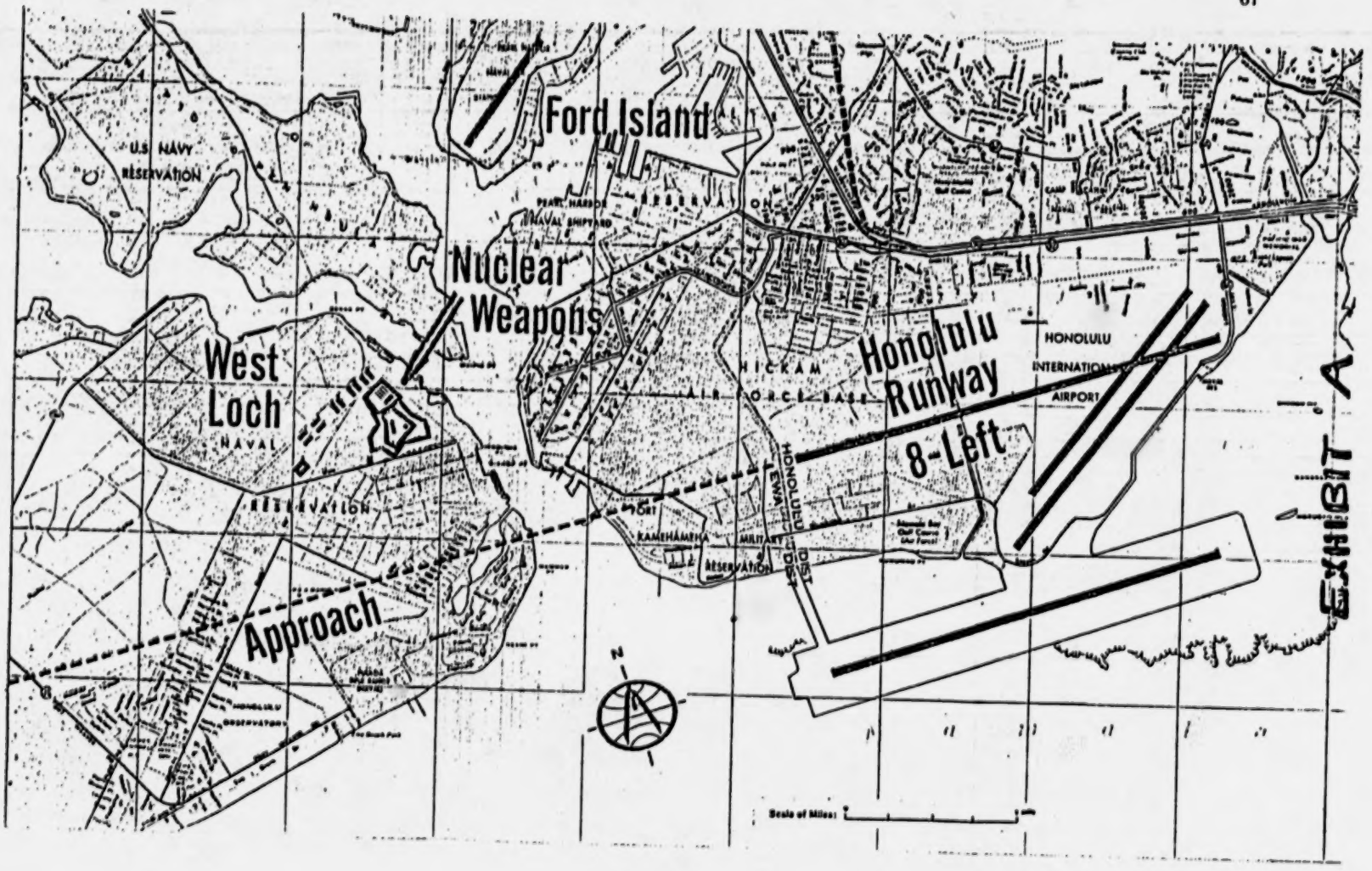
The accompanying maps and diagrams show that an AICUZ study of the Honolulu Airport would probably place the West Loch nuclear weapon facility *within* the Accident Potential Zone (APZ) for runway 8-Left.

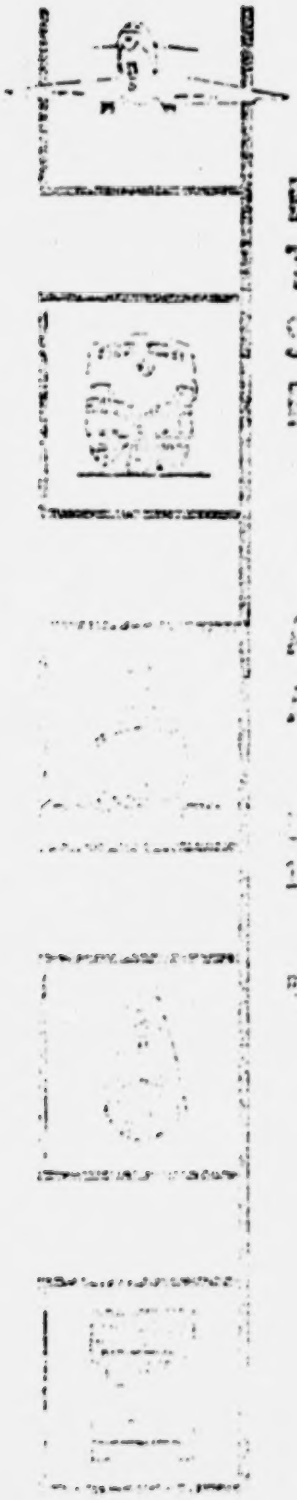
The Barbers Point study states, "The potential for accidents always exists in areas where aircraft are operating. National statistics indicate that this potential hazard increases in intensity the closer you are to runways." (page III–4) It is unlikely that a rational analysis would conclude that nuclear weapon storage and maintenance is a "compatible use" with airport approach zones.

LIST OF EXHIBITS

A	Honolulu runway map showing proximity of nuclear weapons to runway 8-Left final approach course.
B1–B6	Accident records for Air Guard crash on March 21, 1967
C1–C6	Accident records for Air Guard crash on November 15, 1969.
D1–D7	Accident records for Air Guard crash on June 9, 1973
E1–E2	Hawaiian Islands Sectional Aeronautical Chart, showing absense of airspace restrictions over West Loch
F1–F4	Prohibited Areas
G1–G9	Barbers Point Air Installations Compatible Use Zone (AICUZ) study. Note especially:
	G6 showing traffic for Honolulu *crossing* Barbers Point eastbound. A midair collision over Barbers Point could result in a crash at West Loch
	G7 showing Accident Potential Zones (APZ)
	G8 showing actual accidents at Barbers Point. Three accidents occurred *outside* Accident Potential Zones
H1	Honolulu Aerial view (artist's concept)
H2	Honolulu traffic patterns

H3	Honolulu Accident Potential Zones (hypothetical)
H4–H6	Congressional testimony about plutonium dispersal effects of destruction of one nuclear weapon bunker
H7–H8	Graphic illustration of such dispersal assuming trade wind and assuming Kona wind
I1–I5	Recent article on nuclear weapon production by author of this statement.


Ford Island
U.S. NAVY RESERVATION
Nuclear Weapons
West Loch NAVAL RESERVATION
Approach
HICKAM AIR FORCE BASE
Honolulu Runway 8-Left
HONOLULU INTERNATIONAL AIRPORT
KAMEHAMEHA MILITARY RESERVATION
HONOLULU DIST
EXHIBIT A



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ANNUAL REVIEW
AIRCRAFT ACCIDENT DATA

1978

REPORT NUMBER NTSB-

PLAINTIFF'S
EXHIBIT
78-0085
P-15

Best Copy Available

For total accidents, the percentage of pilot causes/factors decreased slightly from 36 percent to 34 percent. On the other hand, personnel and weather causes/factors showed the largest increases between the two time periods. For fatal accidents, the pilot, personnel, and weather cause/factor percentages increased the most from 1967 through 71 to 1972 through 76.

The distributions of accidents by phase of operation for the two periods are as follows:

First Phase of Operation 1/

1967 through 71 and 1972 through 76

Total Accidents

First Phase of Operation	1967-71 Frequency	1967-71 Percent of Total	1972-76 Frequency	1972-76 Percent of Total
Static	23	9.8	18	10.7
Taxi	15	6.4	17	10.1
Takeoff	15	6.4	14	8.3
In-flight	116	49.4	79	46.7
Landing	66	28.1	40	23.7
Unknown/not reported	0	0	1	0.6
Total accident records	235		169	

Fatal Accidents

First Phase of Operation	1967-71 Frequency	1967-71 Percent of Total	1972-76 Frequency	1972-76 Percent of Total
Static	4	11.1	1	4.0
Taxi	0	0	1	4.0
Takeoff	2	5.6	3	12.0
In-flight	16	44.4	7	28.0
Landing	14	38.9	12	48.0
Unknown/not reported	0	0	1	4.0
Total accidents records	36		25	

1/ See phase of operation in Appendix C.

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF HAWAII

CIVIL NO: 78–0085

CATHOLIC ACTION OF HAWAII/PEACE EDUCATION PROJECT ET AL., PLAINTIFFS,

v.

HAROLD BROWN, ET AL., DEFENDANTS.

AFFIDAVIT IN SUPPORT OF MOTION

State of Hawaii }
City & County of Honolulu } ss.

JAMES ALBERTINI, being duly sworn, deposes and says:

1. I am a plaintiff in the above-entitled action, and make this affidavit in support of the motion for a preliminary injunction filed herewith.

2. I have personal knowledge of the facts herein and, if called as a witness, I could testify thereto.

3. Since 1975, I have *regularly* fished in the waters off Waipio peninsula.

4. I am coordinator for plaintiff CATHOLIC ACTION OF HAWAII/PEACE EDUCATION PROJECT.

5. I am very *concerned* about the *storage of nuclear weapons* at the proposed West Loch facility now under construction and fear for the safety of myself and other users of the Waipio peninsula.

6. The *Defendants have filed an environmental impact assessment* (attached as Exhibit A) for an ammunition storage facility at West Loch, Oahu, which they are presently constructing.

7. The cost of the facility will be over $12 million. (See attached Exhibit B).

8. The environmental *assessment concludes* that building of the facility will have *no significant effect on the environment and* will not be *environmentally controversial.* (Exhibit A, page 7).

9. The assessment admits that a significant fish pond that is listed on the National Register of Historic Places is within the present Naval Reservation at West Loch and within the *blast arc* for the facility. (Exhibit A, page 3, paragraph b and attachment B).

10. The assessment states that there are no significant species of plant or animal life on the project site, (Exhibit A, page 3, paragraph a) even though the Defendants supplemental impact statement for the Trident submarine base in Bangor, Washington, which considered West Loch as an alternate base, lists several endangered species as present on the site. (Exhibit C page 3–2–30).

11. The West Loch area is also the area that was designated to provide additional habitat to endangered bird species that were displaced by the construction of the Honolulu Airport's runway expansion. (Exhibit C, page 3–2–23).

12. The Defendants have ships and planes that carry nuclear weapons stationed at Pearl Harbor or on other bases on Oahu. (Attached Exhibit D).

13. All weapons for the Defendants ships and planes are stored at either the Lualualei storage facility, the Waikele facility or the West Loch facility. (See Exhibit E attached).

14. The Waikele facility is a "special weapons" facility. (See Exhibit E). That designation means nuclear weapons are present. (See Exhibit F).

15. The ordinance storage functions at Waikele will be moved to the proposed facility at West Loch. (See Exhibits G,A page 1, attached).

16. Despite the above, the Defendants will neither admit nor deny the presence of nuclear weapons' or their planned storage at the proposed West Loch storage facility. (Attached Exhibit II).

17. The Waikele facility was built in compliance with the Defendants regulations for a nuclear weapons storage facil-

ity. (See Exhibit I). The facility has the required double fencing, special lights and danger signs.

18. The Waikele facility also moves weapons to and from the West Loch docks in accordance with regulations for movement of nuclear weapons. (See Exhibit J).

19. The new storage facility being built at West Loch is designed to meet the regulations required for nuclear weapons storage facilities. (See Attachment D of Exhibit A showing the double fencing.) I have seen the construction blue prints for the proposed West Loch facility and, in addition to the double fencing, the prints show special lighting is to be included in constructing the facility.

20. To move the Waikele ordinance function to the West Loch facility will require movement either through or over residential areas of Oahu in the Waipahu—Ewa area.

21. Both the storage of nuclear weapons on Oahu at West Loch and their transportation within Hawaii have been very controversial issues in the State for many years. (See attached Exhibit K).

22. Resolutions have been introduced in the Hawaii State Legislature calling for controls and limitations on nuclear weapons storage and movement in Hawaii. (See attached Exhibit L).

23. Accidents involving ships, planes and helicopters handling nuclear weapons have been frequent in Hawaii. (See Exhibit M).

24. Should any radioactive leakage occur as a result of damage to a nuclear weapon, the wind patterns for the West Loch area would carry the radioactivity fallout over residential areas adjacent to the proposed facility. (See attached Exhibit N).

25. Flight patterns for Honolulu airport are directly over the project site and danger from plane crashs on the site exists. (See Exhibit O).

26. The present facility already has had safety regulations waived. (See Exhibit P).

27. The area surrounding the proposed project is slated

to be one of the fastest growing areas on Oahu. (See Exhibits A page 2 and Q).

/s/ _____
JAMES ALBERTINI

Sworn and subscribed before me this 16th day of March, 1978

/s/_____

Notary Public First Judicial
Circuit State of Hawaii

My commission expires: June 8, 1981

Department of Defense Directive

SUBJECT *Security Criteria and Standards for Protecting Nuclear Weapons*

Refs.: (a) DoD Directive 5210.41, subject as above, August 14, 1968 (hereby cancelled)

(b) through (n) (see enclosure 1)

I. *REISSUANCE AND PURPOSE*

This Directive reissues reference (a), establishes security policy, criteria and standards for protecting United States nuclear weapons, and extends the provisions of references (b) through (n) (enclosure 1). Reference (a) is hereby superseded and cancelled.

II. *APPLICABILITY AND SCOPE*

A. This Directive applies to all DoD Components (Office of the Secretary of Defense, the Military Departments, the Defense Agencies, the Organization of the Joint Chiefs of Staff, and the Unified and Specified Commands) having responsibility for the protection of United States nuclear weapons. Whenever there are differences between the minimum security criteria and standards set forth herein and those in other approved DoD directives, regulations, or instructions, the more stringent security criteria and standards shall apply.

B. The protection required for complete nuclear weapons shall be applied equally to nuclear warheads and nuclear components of a weapon except limited life components (LLCs). LLCs shall be protected commensurate with their security classification.

C. This Directive does not abrogate nor abridge the authority or responsibility of a commander to apply different, equal or more stringent criteria and standards during emergencies; however, this provision does not apply to the requirement for maintaining U.S. custody of U.S. nuclear weapons and components.

III. *DEFINITIONS*

Terms used in this Directive are defined in enclosure 2.

IV. *POLICY*

A. Nuclear weapons require special protection because of their political and military importance, their destructive power, their cost and the consequences of an unauthorized or accidental nuclear or high explosive detonation. Nuclear weapons must not be subjected to adverse environments except when such exposure is dictated by operational requirements. The conservation of nuclear weapons as a national resource, the safety of the public, operating personnel and property and protecting weapons from damage, disruption or diversion are of paramount importance during all phases of operations.

B. The protection afforded nuclear weapons must counter-balance the inherent risks and threats associated therewith. In providing essential protection, accurate assessment must be made of all relevant factors, such as: (1) the location of the weapons; (2) the configuration in which they are maintained; (3) the nature and capabilities of potentially hostile forces; and (4) the reliability and capabilities of personnel responsible for the protection of nuclear weapons. *Physical security measures, such as barriers, clear zones, lights, and intrusion detection alarm systems must constitute a balanced, in depth system which complements and supplements the protective forces.*

C. Current and possible future threats, national policy, and the resulting need for effective operational flexibility and minimum reaction time often require weapon systems to be on alert and nuclear weapons to be stored in the vicinity of their delivery systems. Outside of the United States, nuclear weapons are generally more vulnerable than those located in the United States. Thus the security criteria and standards applied to nuclear weapons in Class I land areas shall be more stringent than those applied in Class II land areas.

D. Commanders shall review on a recurring basis protection afforded nuclear weapons under their cognizance in conjunction with current intelligence and all other relevant factors. Security programs shall be revised as necessary to assure adequate protection to weapons at all times. When-

ever a threat analysis leads to a doubt that reasonable protection can be provided for nuclear weapons from available resources, the Assistant to the Secretary of Defense (Atomic Energy) (ATSD(AE)) and the National Military Command Center (NMCC) shall be immediately notified by the most expeditious means.

DEFINITIONS

A. Definitions in the "Glossary of Nuclear Weapons Materials and Related Terms" (Technical Manual) AEC-DNA TP 4-1/TM 39-4-1/SWOP 4-1/T.O. 11N-4-1, October, 1969 (reference (m)), and publications which amend, supplement or supersede it apply.

B. For the purpose of this Directive the following definitions shall apply:

1. *Technical Knowledge*: That knowledge, however, obtained, which would allow an individual to tamper with a nuclear weapon in such a manner that such tampering would not be detected during normal prefire operations or weapons monitoring inspections and could cause, then or later, unauthorized prearming, arming, launching, firing, releasing, or detonation of a nuclear weapon or degradation of weapon performance at the target.

2. *Access*: Close physical proximity to a nuclear weapon in such a manner as to allow the opportunity to tamper with or damage a nuclear weapon. Normally, a person would not be considered to have access if an escort or a guard were provided for either the person, or the weapon when the person is in the close proximity of it.

3. *Critical Position*: A position, the incumbent of which, by the nature of his authorized duties:

a. Has access and technical knowledge as defined above; or

b. Can, at battalion/squadron/ship level or below, either directly or indirectly cause the launch or employment of a nuclear weapon; or

c. Controls or uses sealed authenticators, codes, strategic missile computer tapes, emergency action messages, or release procedures for nuclear weapons.

4. *Controlled Position*: A position, the incumbent of which, by the nature of his authorized duties:

a. Has access but no technical knowledge as defined above; or

b. Controls entry into an Exclusion Area, but does not have access or technical knowledge as defined above.

5. *Exclusion Area*: *Any designated area in which one or more nuclear weapons are located.*

6. *Limited Area*: *A designated area surrounding one or more Exclusion Areas.*

7. *Security Force (SF)*: Those persons whose primary duties are to protect nuclear weapons.

8. *Security Alert Team (SAT)*: Two or more security force members, in addition to those on established guard posts, capable of immediate response to any irregularity as a reinforcing element.

9. *Backup Alert Force (BAF)*: Three or more security force members in addition to those on established guard posts and the SAT, designated to reinforce the SAT.

10. *Reserve Force (RF)*: Ten or more designated and trained personnel for response in support of on-duty security force personnel.

11. *Augmentation Reserve Force (ARF)*: Additional military personnel (or units) other than those assigned to a specific security or reserve force, trained and capable of augmenting a security and reserve force as required.

12. *Classes I and II Land Areas*: Land areas on which nuclear weapons are located are categorized as:

a. Class I—Areas other than the Continental United States, Alaska and Hawaii.

b. Class II—The Continental United States, Alaska and Hawaii.

13. *Other Emergency Forces*: Designated personnel constitute the firefighting force, Explosive Ordnance Disposal (EOD) teams; nuclear accident/incident teams, medical emergency personnel, etc.

14. *Waiver*: A temporary deviation from the physical security provisions of this directive.

15. *Exception*: A permanent deviation from the physical security provisions of this directive.

16. *Duress System*: A method by which security force personnel who control entry into, vouch for or escort visitors into a Limited and/or Exclusion Area, can covertly communicate a situation of duress to other operating or security personnel.

CRITERIA AND STANDARDS FOR PROTECTING NUCLEAR WEAPONS

A. *General*. The criteria and standards provided herein are an extension of the provisions of references (b) through (j) (enclosure 1).

1. In planning the security system for nuclear weapons, priority of efforts and resources shall be given to the protection of nuclear weapons themselves. Such security shall be in depth, commensurate with the threat to, or vulnerability of the weapons, space limitations, and environmental factors.

2. All Exclusion and Limited Areas shall be designated and conspicuously posted as restricted areas under the provisions of Section 21, Internal Security Act of 1950 (50 U.S.C. 797) (reference (j)).

3. All nuclear-capable certified units shall comply with the appropriate provisions of this directive, even if war reserve weapons are not possessed.

B. *Selection and Use of Personnel*. Personnel associated with and directly influencing the security of nuclear weapons can be classified as command and supervisory, operational, security, support and maintenance personnel. Other established policies and directives, such as DoD Directives 5210.8 and 5210.42 (references (d) and (k)), primarily prescribe the security clearance and selection criteria for these people.

1. Enclosure 4 lists the typical requirements by type duty position of personnel who are assigned in critical and controlled positions. Because of the diversity of position titles and duties between the Services, the definitions in paragraphs B.3. and B.4., enclosure 2, are the governing factors as to whether an individual is assigned to a critical or controlled position within a specific unit.

2. All positions herein categorized as critical or controlled positions shall be formally so designated.

3. A Background Investigation to be utilized in screnning personnel for duty in critical positions, is required prior to such assignment.

4. Prior to performing nuclear duties, each individual assigned to a critical position shall be qualified and certified as proficient by a qualified person designated in writing for the purpose. All individuals scheduled for assignment to critical positions listed in paragraphs 5.a. and 9., enclosure 4, shall be qualified by formal course of instruction and

7. When warranted by emergency conditions, the primary efforts of SF, RF and ARF shall be directed to protecting areas in which nuclear weapons are located, to assure that authorized emergency evacuation or destruction can be accomplished.

8. Plans shall be maintained to withstand or repel concentrated penetration and seizure efforts by militant, terrorist or other criminal element. Under no circumstances will an unauthorized penetrating force be permitted to remove any material from an Exclusion Area. Every means available shall be used to preclude such an occurrence.

a. All possible actions shall be taken, including the *use of deadly force*, to preclude unauthorized access to, or seizure of, any nuclear weapons storage area, transporting vehicle with weapons aboard, or nuclear weapons.

b. All necessary actions, including the use of deadly force, shall be taken to ensure immediate reoccupation and/or securing of any Exclusion Area which may have been penetrated.

c. Should hostages be used as a means of entering or occupying an Exclusion Area, or as cover for the removal of nuclear weapons from such an area, the welfare and safety of the hostages shall not be considered as a deterrent in actions to stop the penetrating force.

d. Correct interpretation of the intent and temper of suspect elements is an essential element of an adequate security posture. Supporting security forces shall be provided detailed guidance and training in recognizing the difference between forceful or determined hostile penetration, and the assembly of demonstrators, inadvertent trespassing or comparable encroachments.

e. Whenever possible, there shall be a defined action which must occur, or an attempted breach of a specific safe-

guard or boundary, as a precondition to the application of deadly force.

f. Appropriate precautionary actions shall be taken when warranted by such things as weather conditions or low visibility.

D. *Intelligence*

1. Under the guidance of the Joint Chiefs of Staff, the Defense Intelligence Agency (DIA), the Services and the Unified and Specified Commands shall provide commanders or organizations responsible for safety and security of nuclear weapons with current intelligence concerning threats to nuclear weapons. As a minimum:

a. The Services, consistent with the policies of DoD Directive informed concerning (a) requirements for counterintelligence evaluated information and support related to the security of nuclear weapons, and (b) local incidents posing a threat to the security of nuclear weapons.

3. Subject to annual validation, commanders responsible for the safety and security of nuclear weapons may retain threat information as long as it is current, valid, and relevant to the security of nuclear weapons under their responsibility.

E. *Two-Man Concept*

1. During any operation which may afford access, there shall be present a minimum of two authorized persons, each capable of detecting incorrect or unauthorized procedures with respect to the task to be performed, and familiar with applicable safety and security requirements. Two authorized persons shall be considered to be present when they are in a physical position from which they can positively detect incorrect or unauthorized procedures with respect to the task or operation being performed.

2. When application of the two-man concept is required, it shall be enforced constantly by the persons who constitute the team, while they are accomplishing the task or operation assigned and until they leave the area within which it is required.

3. The security force shall assure that no lone individual is permitted in a Limited or Exclusion Area unless controlled by: (a) the use of intrusion detection alarm systems which meet the requirements of J., below; (b) security force personnel; or, (c) a combination thereof. No lone individual is to have access to a nuclear weapon.

4. The only exceptions to this concept shall be those specifically set forth in approved nuclear weapons systems safety rules established in accordance with the provisions of DoD Directive 5030.15 (reference (h)).

F. *Entry and Access Control*

1. Entry control to Limited and Exclusion Areas shall assure positive identification of all personnel prior to admission. As a minimum, the following shall be instituted: (a) a controlled picture badge system; (b) formal entry control rosters; (c) a visitor escort system; and (d) a duress system. In Limited and Exclusion Areas where a badge exchange system is in effect, and the badge contains a photograph and sufficient information to assure positive identification of the bearer, it shall suffice as a formal entry control roster.

2. *Entry into Limited or Exclusion Areas shall be restricted to authorized personnel.* Persons shall be authorized entry only for performance of assigned tasks and the number so authorized shall be kept to a minimum. All personnal authorized entry into such areas shall have an appropriate personnel security clearance. Personnel authorized entry without a security clearance shall be kept under constant surveillance by a designated escort. Movements of service or construction personnel in Limited and Exclusion Areas shall be restricted to those necessary for the performance of assigned tasks.

3. Emergency access provisions are set forth in C.3.d., above.

G. *Physical Barriers*

1. Nuclear weapons shall be stored within an Exclusion Area. Removal from an Exclusion Area is authorized only when required for operational reason or when in transit in accordance with N., below.

2. Physical barriers shall clearly delineate the zone of protection associated with Limited and/or Exclusion Areas and provide positive means of denying or impeding entry. These barriers may be walls or fences on land, or decks and bulkheads aboard ship. Where permanent physical barriers are considered impractical, because of the temporary nature of the Limited and Exclusion Areas or for other reasons, such as the space limitations aboard a submarine or aircraft, their absence shall be compensated for by temporary physical barriers, additional guards or patrols, controls, or other security measures. At facilities where nuclear weapons are located on land, the following minimum requirements shall be met in:

a. Class I land areas, *two barriers*.

b. Class II land areas, one barrier, except where weapons are located at remote sites and protected by relatively small organizations without colocated supporting military forces (such as SAC Satellite Bases and ADC dispersed operating bases and other sites not colocated with other forces). Service Storage Facilities (SSFs) and *Operational Storage Sites* (OSSs) shall be provided with *two barriers*.

3. Where more than one permanent physical barrier is required, the barriers shall be separated not less than 15 feet nor more than 150 feet.

4. Numbers of entry control gates or doors (pedestrian and vehicle) shall be kept to a minimum. When closed, they shall provide a barrier structurally comparable to their associated barrier(s) and so designed that the traffic through them shall be under the positive control of the security force. Unguarded entrances to Exclusion Areas shall be locked and under human, electrical or mechanical surveillance.

5. Permanent physical barriers should be located, with due consideration to required *clear zones*, terrain features, property lines, and building layouts, not less than 30 feet and normally not more than 150 feet from buildings or objects being protected. Ideally, nuclear weapons storage and

assembly buildings should be located 50 feet from the inner perimeter fence.

H. *Clear Zones*

1. To the maximum extent feasible, clear zones shall be free of all obstructions, topographical features, and vegetation which may offer concealment of intruders or reduce the effectiveness of the physical barrier.

2. Clear zones shall be maintained around permanent physical barriers located in Classes I and II land areas. As a minimum, they shall extend 30 feet on both sides of the physical barriers, including all areas between barriers when more than one barrier is utilized. Whenever this is not practical, such as when serious erosion problems would result, or local laws prohibit clearing, compensating security measures shall be employed.

I. *Lights*

1. Security lighting shall be provided for permanent, Limited and Exclusion Areas in Classes I and II land areas in such a manner as to discourage, and facilitate the detection of, attempts of unauthorized approach to, and entry into, such areas. Such lighting shall be under the control of the security force. Where such lighting installation is impractical, such as immediately adjacent to runways, its absence shall be compensated for by additional guard posts, patrols, controls, or other security measures.

2. Lighting shall be positioned within the protected area, on, above, or near permanent physical barriers, entry control gates, and areas or structures where weapons are located in such a manner as to provide adequate illumination for personnel identification, entry doors to storage structures and areas immediately surrounding weapons located in the open.

3. A protected alternative source of power shall be provided for all security lighting, and procedures shall be established to assure prompt availability of power from an alternate source. Alternate sources of emergency power shall incorporate automatic start features unless they have continuous power available as a design feature.

4. Where feasible, perimeter and access control point lighting shall be positioned advantageously to security forces, so as to prevent glare from blinding sentries and to avoid silhouetting or highlighting sentries from outside the restricted areas.

J. *Intrusion Detection Alarm (IDA) Systems*

1. The basic purpose of such systems shall be to provide useful and practical assistance to a security force. As a minimum, intrusion detection alarm systems shall be used on all nuclear weapon storage structures in permanent sites located in Classes I and II land areas. To the extent feasible, intrusion detection systems should be installed as a part of storage and weapon alert area barrier systems. Compensating security control measures and security forces shall be employed at temporary weapon storage areas, structures or spaces and permanent storage areas without IDA systems, or with IDA systems which do not meet the minimum requirements of 2., below.

2. Such systems shall be dependable, easy to maintain in their operational environment, adequately protected against tampering, and fail-safe (i.e., alarm in case of failure); have low nuisance alarm rates; be equipped with a protected prompt alternate source of power, or an emergency battery power source. They shall provide both audible and visual alarm indications.

3. IDA systems shall be tested and inspected daily to assure proper functioning. Record data shall be maintained relative to alarms, false alarms, tests, malfunctions, and servicing/maintenance to allow for continuous evaluation of installed systems.

K. *Security Forces Communication System*

1. At least two systems of communication shall be provided: (a) from storage/alert areas proper to the exterior controlling or reinforcing military unit, and (b) within the storage area linking all important fixed guard facilities. One of these systems shall be radio, provided with an independent emergency power source.

2. A system of radio communication shall be provided between patrols and fixed security force locations. Fixed stations shall be provided with an emergency power source.

3. When in transit, a system of communications shall be provided to facilitate frequent periodic checks with designated communications or control activities.

L. *Security Features of Weapon Storage Structures.* The physical security features of permanent weapon storage structures in Classes I and II land areas shall be as specified in the Nuclear Weapons Storage Facilities Manual (reference (i)).

In the Supreme Court of the United States

NO. 80-1377

CASPAR W. WEINBERGER, SECRETARY OF DEFENSE, ET AL., PETITIONERS

v.

CATHOLIC ACTION OF HAWAII/PEACH EDUCATION PROJECT, ET AL.

ORDER ALLOWING CERTIORARI. Filed April 6, 1981

The petition herein for a writ of certiorari to the United States Court of Appeals for the Ninth Circuit is granted.